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RAILWAY AGE

AUGUST 27, 1949

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YOUNGSTOWN

● *All-Steel Car Sides*

Being applied to 3000 New Refrigerator Cars in 1949
by
Pacific Fruit Express in Company Shops

YOUNGSTOWN STEEL DOOR COMPANY

Camel Sales Company
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Lower Diesel Maintenance Costs

Engines stay cleaner when lubricated with Texaco Dieseltex HD

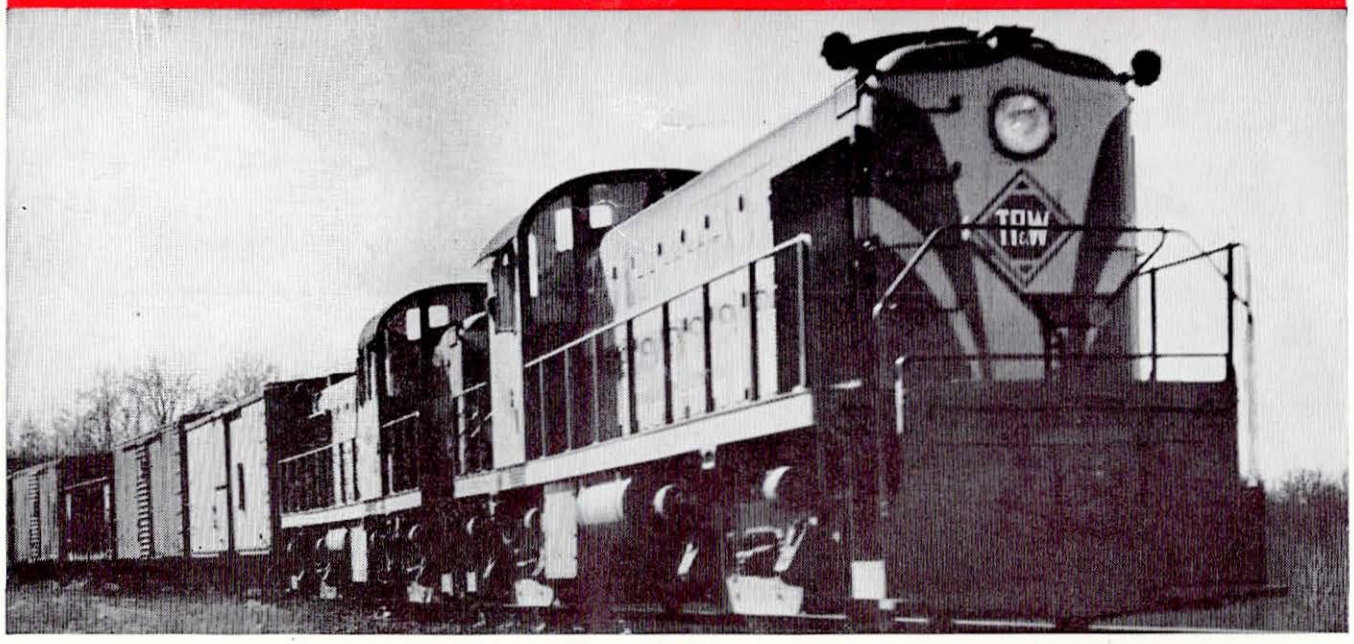
YOU'RE not "experimenting" when you turn to *Texaco Dieseltex HD*. This fine railroad Diesel lubricating oil has proved its worth in service on the rails. It has more than enough of what it takes to meet the stiffest requirements of leading Diesel locomotive builders.

Texaco Dieseltex HD keeps engines cleaner, better protected and more efficient because it has high detergent-dispersive characteristics, plus an exclusive formula containing a special heavy-duty additive that gives exceptional resistance to oxidation and sludge formation.

Let a Texaco Lubrication Engineer show you how *Texaco Dieseltex HD* is increasing efficiency and economy for other railroads. Ask him to tell you about Texaco's Systematic Engineering Service. Just call the nearest Railway Sales Division office listed below, or write The Texas Company, *Railway Sales Division*, 135 East 42nd Street, New York 17, N. Y.

NEW YORK • CHICAGO • SAN FRANCISCO • ST. PAUL • ST. LOUIS • ATLANTA

TOLEDO, PEORIA & WESTERN RAILROAD — "Best East to West" — keeps these two 1500 h.p. Alco Road Switchers busy around the clock. They average 12,000 miles monthly. Both units are lubricated with *Texaco Dieseltex HD* exclusively.



TEXACO

TEXACO Dieseltex HD

FOR ALL RAILROAD DIESELS

Published weekly by Simmons-Boardman Publishing Corporation, Orange, Conn. Executive Offices, 30 Church Street, New York 7, N. Y. Entered as second class matter at Orange, Conn., under the act of March 3, 1879. Subscription price $6.00 for one year. U. S. and Canada. Single copies, 50 cents each. Vol. 127, No. 9.

LOW-ALLOY

HIGH-TENSILE

Mayari R

...fabricated like carbon steel

Because of the higher properties of Mayari R low-alloy, high-tensile steel some designers assume it is much harder to fabricate than structural steel. Not so.

Experience by many Mayari R users shows that the same equipment and same methods used for forming, punching, shearing and welding ordinary carbon steel usually work well with Mayari R. The only difference is that slight adjustments or allowances may be needed to offset Mayari R's higher properties.

This means that users can take advantage of Mayari R's higher yield point, greater tensile strength, and superior corrosion-resistance in their products without the burden of excessive fabricating costs.

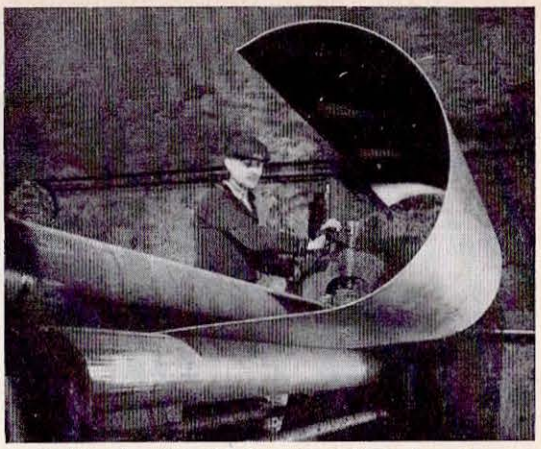
Mayari R is now used in products ranging from buses, trucks and railway cars to tanks, towers and highway bridges. For more information on this versatile steel, its advantages and its applications, write for Mayari R Catalog 259.

BETHLEHEM STEEL COMPANY, BETHLEHEM, PA.

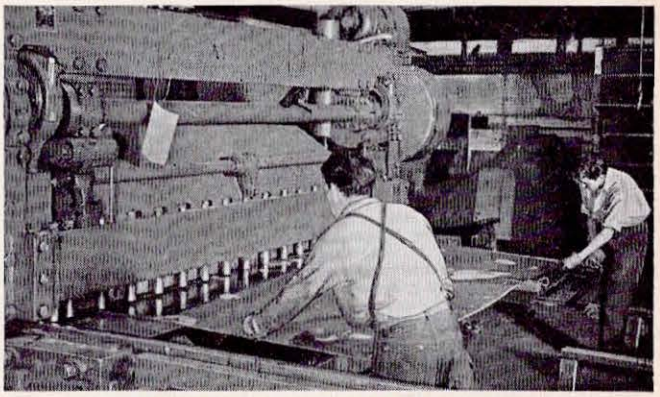
On the Pacific Coast Bethlehem products are sold by
Bethlehem Pacific Coast Steel Corporation

Export Distributor: Bethlehem Steel Export Corporation

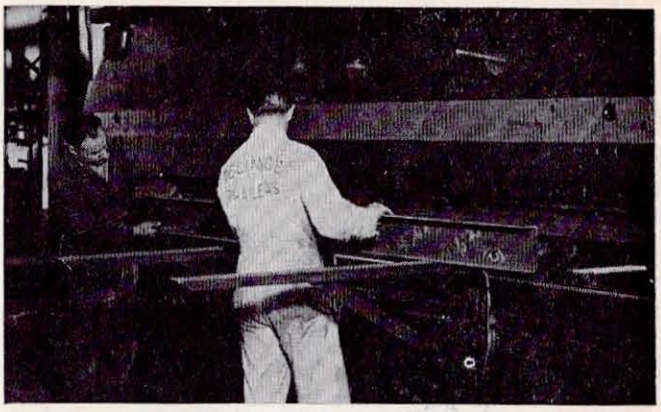
BETHLEHEM STEEL



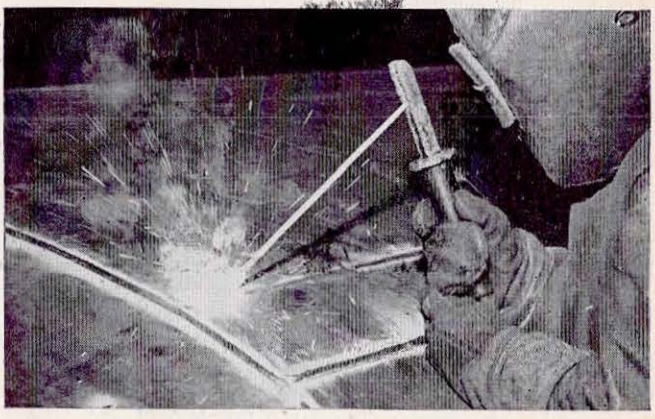
Roll-bending Mayari R sheets for cylindrical products



Shearing heavy-gage Mayari R sheets to size



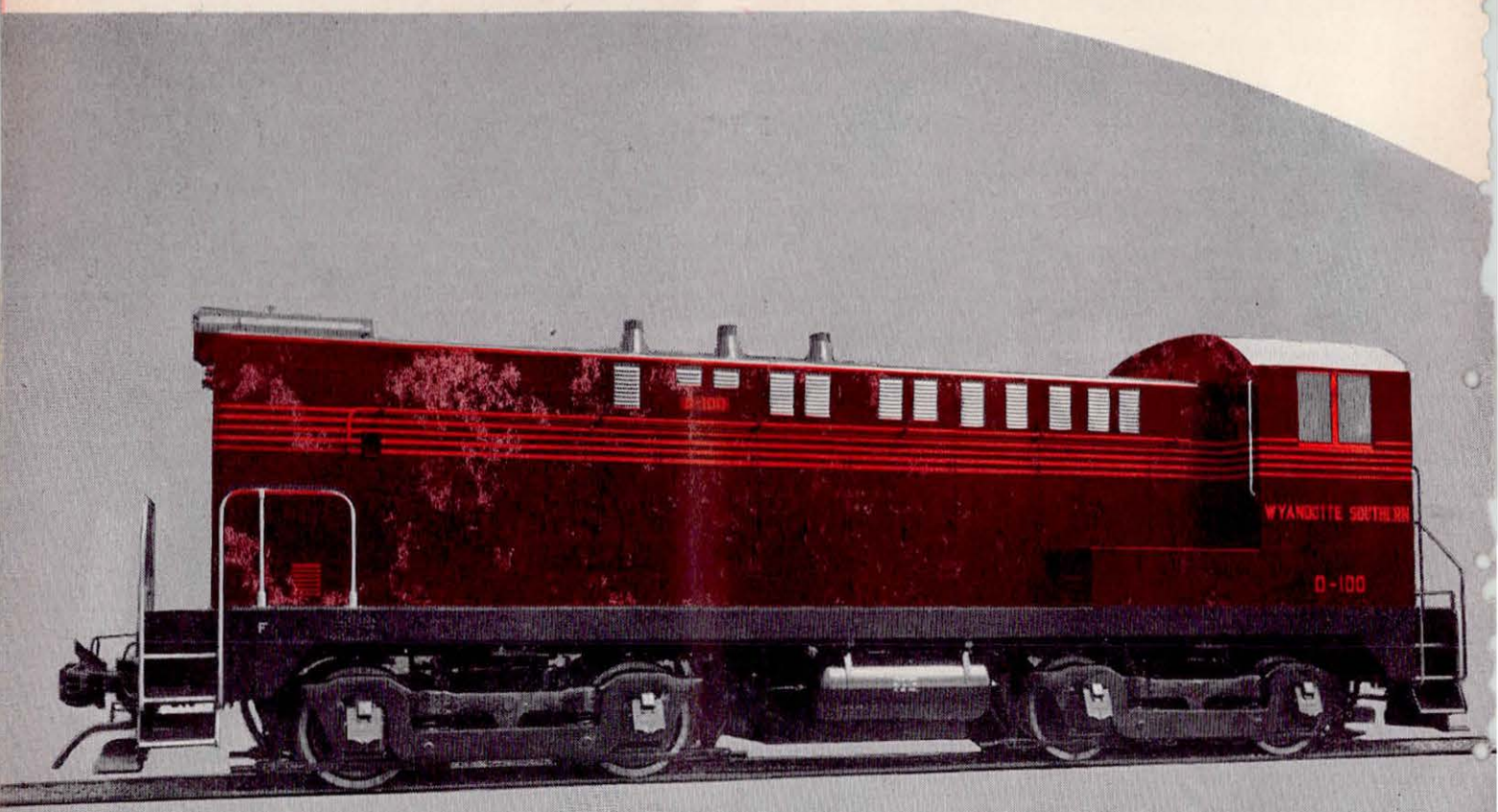
Cold-forming channel sections from Mayari R



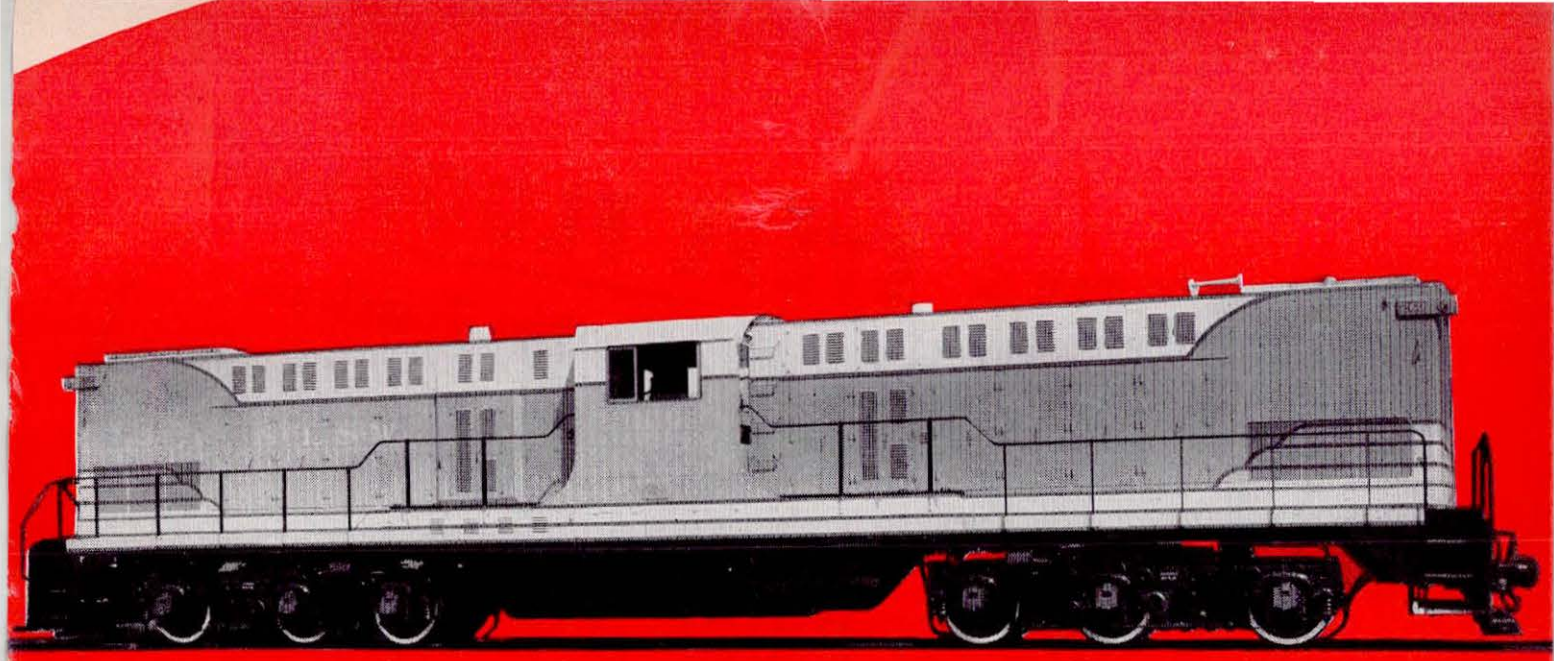
Welding Mayari R with ordinary electric-arc equipment

Mayari R *makes it lighter...stronger...longer lasting*

on the level
or over the hump
Baldwin
diesel-electric
switchers
will do the job



Baldwin 750-hp. diesel-electric switching locomotive, powered by one 6-cylinder, normally aspirated diesel engine.



Baldwin 2000-hp. transfer locomotive, powered by two 6-cylinder, turbocharged diesel engines.

Switching and hump yard operations are important factors in determining the speed and efficiency of freight handling. That is why it is important to choose for each assignment a rugged, dependable locomotive type that meets your particular operating requirements.

You will find the locomotive that is just right for the job among the following Baldwin diesel-electrics:

750-hp. and 1000-hp. Switchers
1000-hp. Road Switcher
1500-hp. Road Switchers with 4-wheel or 6-wheel trucks
1500-hp. Heavy Duty Road Switcher—6 traction motors
2000-hp. Transfer—6 traction motors

The nearest Baldwin representative will welcome the opportunity to tell you what these locomotives can do for you.

BALDWIN

BLW THE BALDWIN GROUP

DIESEL-ELECTRIC LOCOMOTIVES

The Baldwin Locomotive Works, Philadelphia 42, Pa., U. S. A. Offices: Boston, Chicago, Cleveland, Houston, New York, Philadelphia, Pittsburgh, San Francisco, Seattle, St. Louis, Washington. In Canada: Canadian Locomotive Company, Ltd., Kingston, Ontario.

NAILABLE STEEL FLOORING*

Keeps Gondolas Off the Rip Tracks— Out of the Shops

NAILABLE STEEL FLOORING helps keep gondolas off the Bad Order Report, saves you money in floor repair and replacement costs. Check these points that show *why* NAILABLE STEEL FLOORING cuts floor maintenance costs and keeps cars where they belong—on the line, bringing in revenue.

Greater Strength—Channel design gives NAILABLE STEEL FLOORING higher strength, more resistance to dishing than steel plate floors. After months of grinding impacts from magnets, hot pig iron and the clamshell shown, the NAILABLE STEEL FLOOR in a test car retained its over-all flatness and nailability, its suitability for blocked and skidded loads.

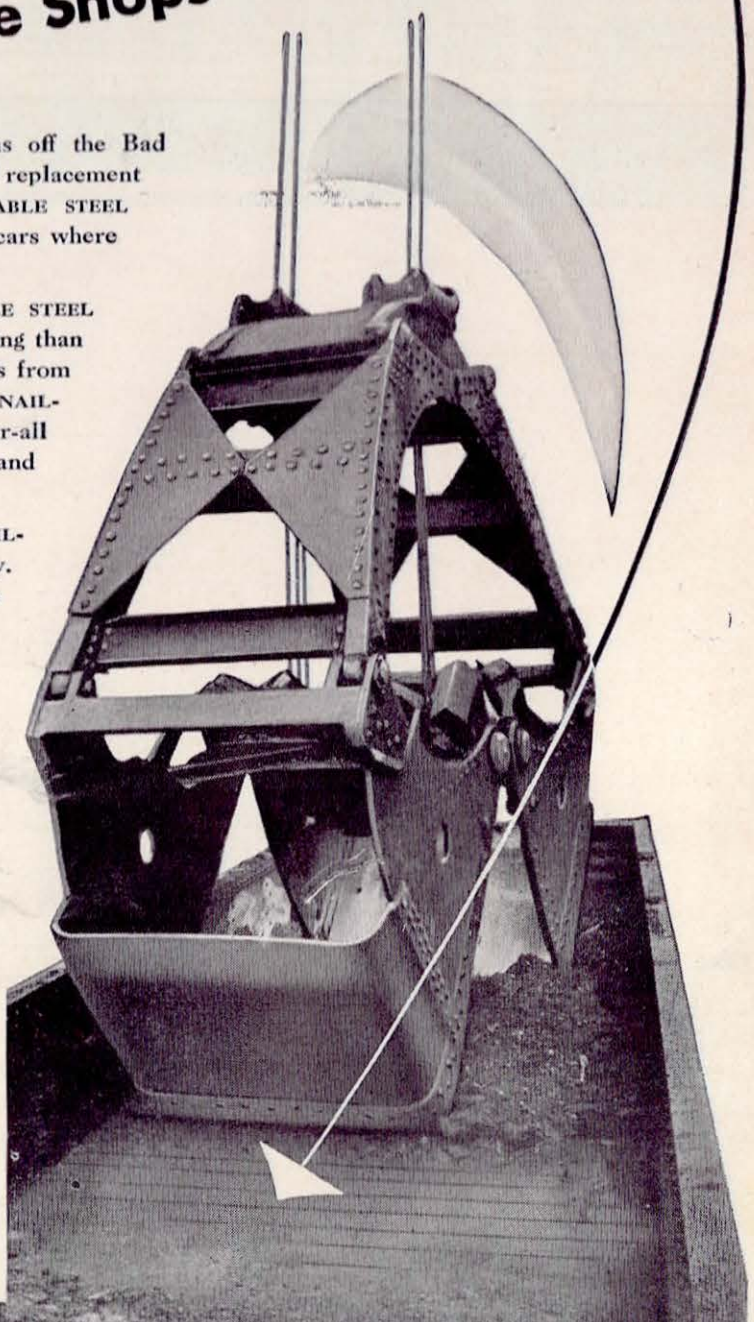
No Nail Damage—Nails can't rip or splinter NAILABLE STEEL FLOORING, can't damage it in *any* way. Held tighter than in wood, the proper size nails (20d or 30d in gondolas) are easily driven into the nailing grooves and can be readily removed.

High Rust Resistance—NAILABLE STEEL FLOORING is safer from rust because it's made from N-A-X HIGH-TENSILE steel which has three to five times the corrosion resistance of plain carbon steel and more than twice that of copper-bearing steel.

Combining nailability and strength, NAILABLE STEEL FLOORING does the job of both wood and conventional steel plate floors—and does each of them better. It saves money in operating as well as maintenance costs. When your next new car or rebuilding program comes up specify NAILABLE STEEL FLOORING.

NO TORN UP PLATES. This photograph shows gondola service at its roughest. Big clamshells like this ten-ton giant often tear rivet heads out of steel plate floors and rip up the cover plates. NAILABLE STEEL FLOORING *cannot* be torn up because it has no projecting rivet heads, no plate edges.

*PATENTS PENDING



NAILABLE STEEL FLOORING

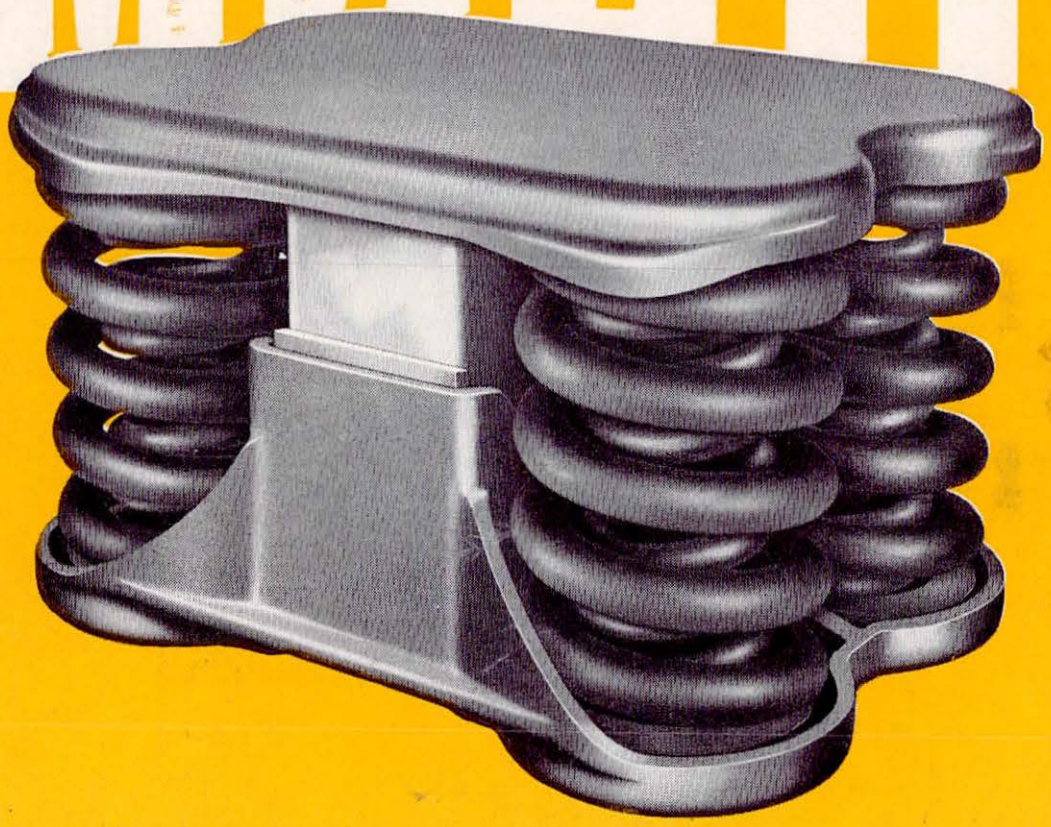
A GREAT LAKES STEEL PRODUCT

GREAT LAKES STEEL CORPORATION

STEEL FLOOR DIVISION • PENOBSCOT BUILDING • DETROIT 26, MICHIGAN

UNIT OF NATIONAL STEEL CORPORATION

SMOOTH



AMERICAN
STEEL
FOUNDRIES

A·S·F *Ride-Control* PACKAGE

The "package" way is the *low-cost* way to make old trucks truly modern. These convenient *package* replacements for A.A.R. coil springs are "tops" in riding qualities. Developed by Ride-Control Truck engineers—along *basic* Ride-Control principles—they provide the acknowledged essentials for smooth performance in a single, *self-contained* unit. Long spring travel and constant friction control protect roadbed, car, and contents. Ask your A.S.F. Representative for all the facts and *interesting* comparative figures.

Visit the Chicago Railroad Fair

this locomotive lives 9 lives

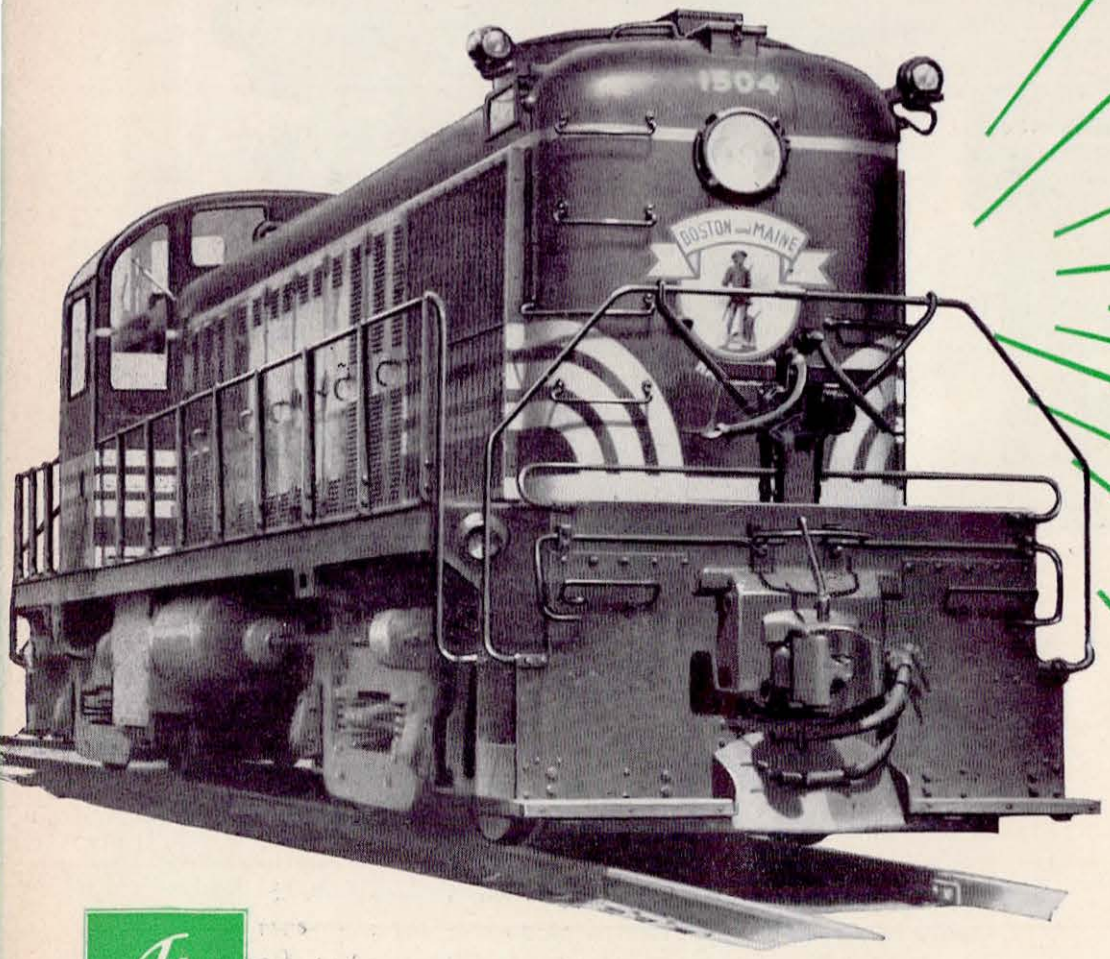
. . . at the same time

Assigned Freight

Assigned Passenger

Yard Switching

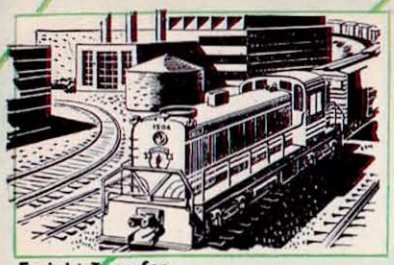
Helper Service



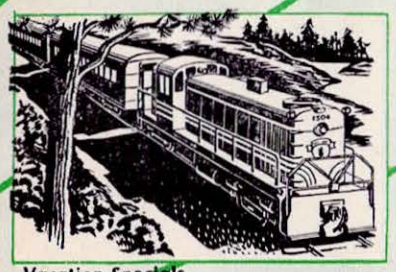
THE ALCO-G.E. "1500" ROAD SWITCHER

Alco GE

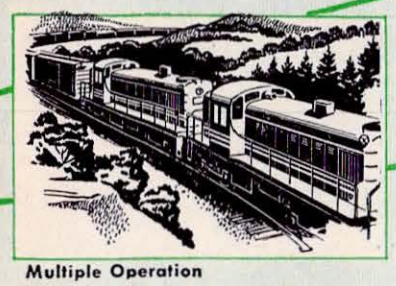
AMERICAN LOCOMOTIVE



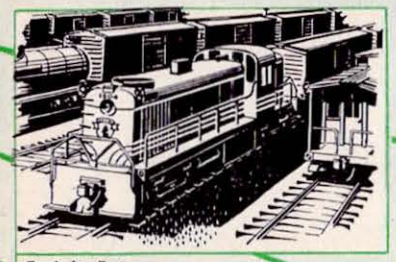
Freight Transfer



Vacation Specials



Multiple Operation



Freight Extras

Hump Service

The key to the most efficient branch line operation of motive power is high utilization. On the branch line this means a locomotive with the inherent capability and availability to handle many types of assignment proficiently.

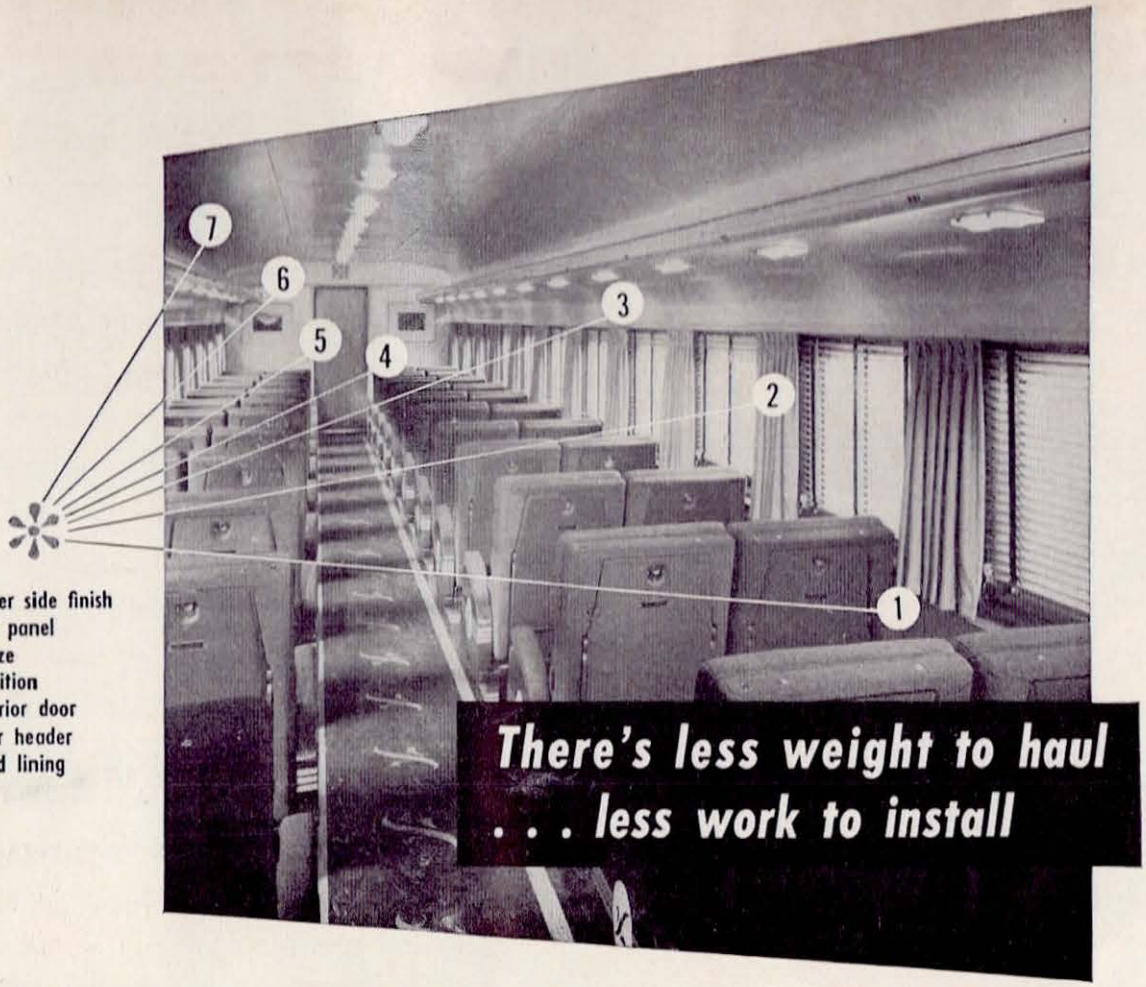
On the Boston and Maine, for instance, seven Alco-G.E. 1500-hp road switchers have been placed in a pool at East Deerfield. Together with five yard switchers, these units handle efficiently every type of service required in the Deerfield–Springfield area—passenger, freight, switching, helper service, and transfer work—in single units or in multiple. In fact, these Alco-G.E. diesel-electrics replaced twenty steam locomotives of many classes formerly required to handle the same assignments.

Through close checks of operating and assignment records, one railroad after another is discovering that high availability and high utilization are built into the Alco-G.E. road switcher. Alco-G.E. will be glad to make this information available to you, and to survey your requirements with an eye to increasing utilization through the use of Alco-G.E. locomotives on your road.

IN CANADA Alco GE IS MLW GE

. . . and GENERAL ELECTRIC

113-232



1. Lower side finish
2. Pier panel
3. Frieze
4. Partition
5. Interior door
6. Door header
7. Head lining

Plymetl ... for passenger car interiors

A lighter weight car that costs less to haul . . . a more easily constructed car that is built faster at savings in labor costs . . . these advantages of Plymetl mean savings to you.

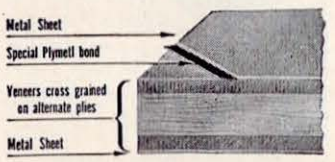
These weight savings are substantial. A car with 1,200 square feet of partitions, etc., using Plymetl instead of hollow steel nets a saving of 3,600 lbs. Plymetl instead of hollow aluminum partitions means a saving of 660 lbs.

Construction costs are lower too, because Plymetl is installed in large panels with less handling. The inherent stiffness of Plymetl reduces the number of framing members required and labor time can be still further reduced with prefabricated or preformed panels. Plymetl can be worked right at the bench with ordinary woodworking tools.

Add to these savings the further advantages of Plymetl. It has a smooth, ripple free surface that takes an excellent finish for long-lasting interior beauty. It is sound deadening and vibration resistant. Edges of Plymetl panels may be solder sealed to prevent entrance of moisture.

Haskelite Plymetl is a profitable investment when building or remodeling cars. Haskelite pioneered metal-bonded-to-wood materials, and has led the way in establishing standards of excellence. For continuing satisfaction, specify Haskelite Plymetl.

PLYMETL CONSTRUCTION



Combines tensile strength and smooth surface of sheet metal with the light weight and stiffness of plywood.

Thin sheet metal, such as zinc-coated steel, stainless steel or aluminum, permanently bonded to one or both sides of a resin bonded plywood plaque provides an exceptionally stiff, lightweight material. (⅜" steel-faced Plymetl is 77 times as stiff as sheet steel of equal weight per square foot.)

GET THESE TWO FREE DESIGNING HELPS

WEIGHT-AND-STIFFNESS COMPARING SCALE—Easy to use slide scale gives comparative weight and stiffness of steel, aluminum and Plymetl. Free to designers while supply lasts.

TECHNICAL BULLETIN—Latest complete information on construction and fabrication of Haskelite Plymetl.

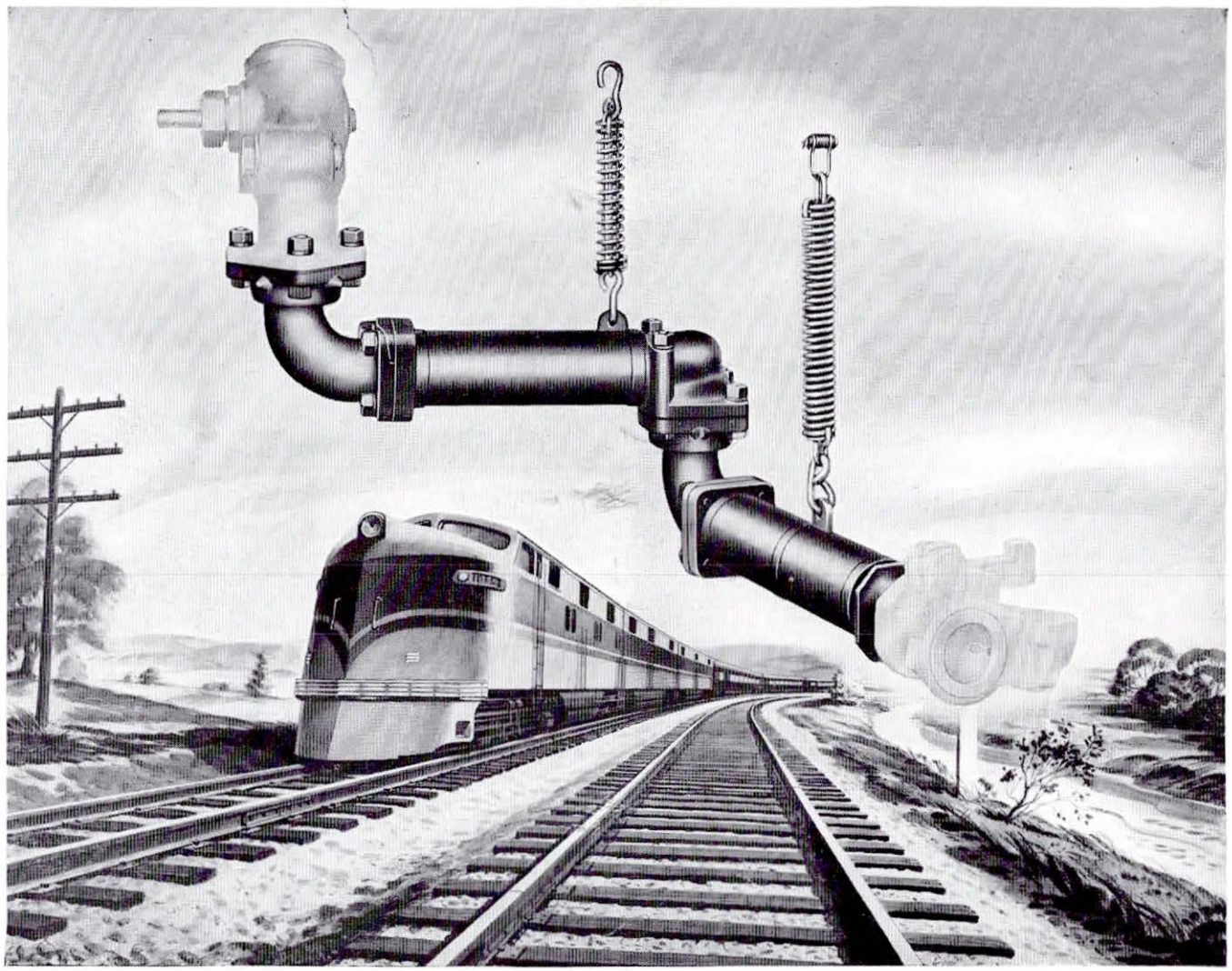
HASKELITE®

structural materials for men who build better

HASKELITE MANUFACTURING CORP., Dept. RR Grand Rapids 2, Michigan

New York Philadelphia Detroit Chicago St. Louis Canada: Railway & Power Engineering Corp., Ltd

REDUCE YOUR INVENTORY AND STOCK OF PARTS REQUIRED



Barco Steam Heat Connections for passenger cars, diesel and steam locomotives have many main parts that are interchangeable between different sizes—thus reducing valuable funds tied up in protection stock. Barco Connections have 50% fewer wearing parts, are so strong and simply designed that they do not blow out or fail suddenly. Easy to install or repair, Barco is saving time and money on hundreds of railroads. Write Barco Manufacturing Co., 1800I Winnemac Ave., Chicago 40, Illinois. In Canada: The Holden Co., Ltd., Montreal, Canada.

BARCO

STEAM HEAT CONNECTIONS FOR PASSENGER CARS, DIESEL AND STEAM LOCOMOTIVES

FREE ENTERPRISE · THE CORNERSTONE OF AMERICAN PROSPERITY

CUT YOUR WHEEL

with

MOST ECONOMICAL
HIGHLY SERVICEABLE
QUICKLY AVAILABLE
EVERYWHERE REPLACEABLE
GREATER SALVAGE VALUE

COSTS NOW

Chilled Tread Car Wheels

by a.c.f.

AMERICAN CAR AND FOUNDRY COMPANY, NEW YORK • CHICAGO • ST. LOUIS
CLEVELAND • PHILADELPHIA • WASHINGTON • PITTSBURGH • SAN FRANCISCO
Wheel Foundries in BERWICK, PA. • HUNTINGTON, W. VA. • ST. LOUIS, MO. • CHICAGO, ILL.

MAXIMUM PROTECTION

FOR CARS and LADING

Cardwell and Westinghouse shock-absorbing devices protect rolling stock against excessive horizontal, vertical, lateral and angular forces. They are designed with a high factor of safety, resulting in capacities well above the requirements.

WESTINGHOUSE

Friction Draft Gear
Certified A.A.R.

CARDWELL

Friction Bolster Springs
. . . for A. A. R. and
Long-Travel Springs.

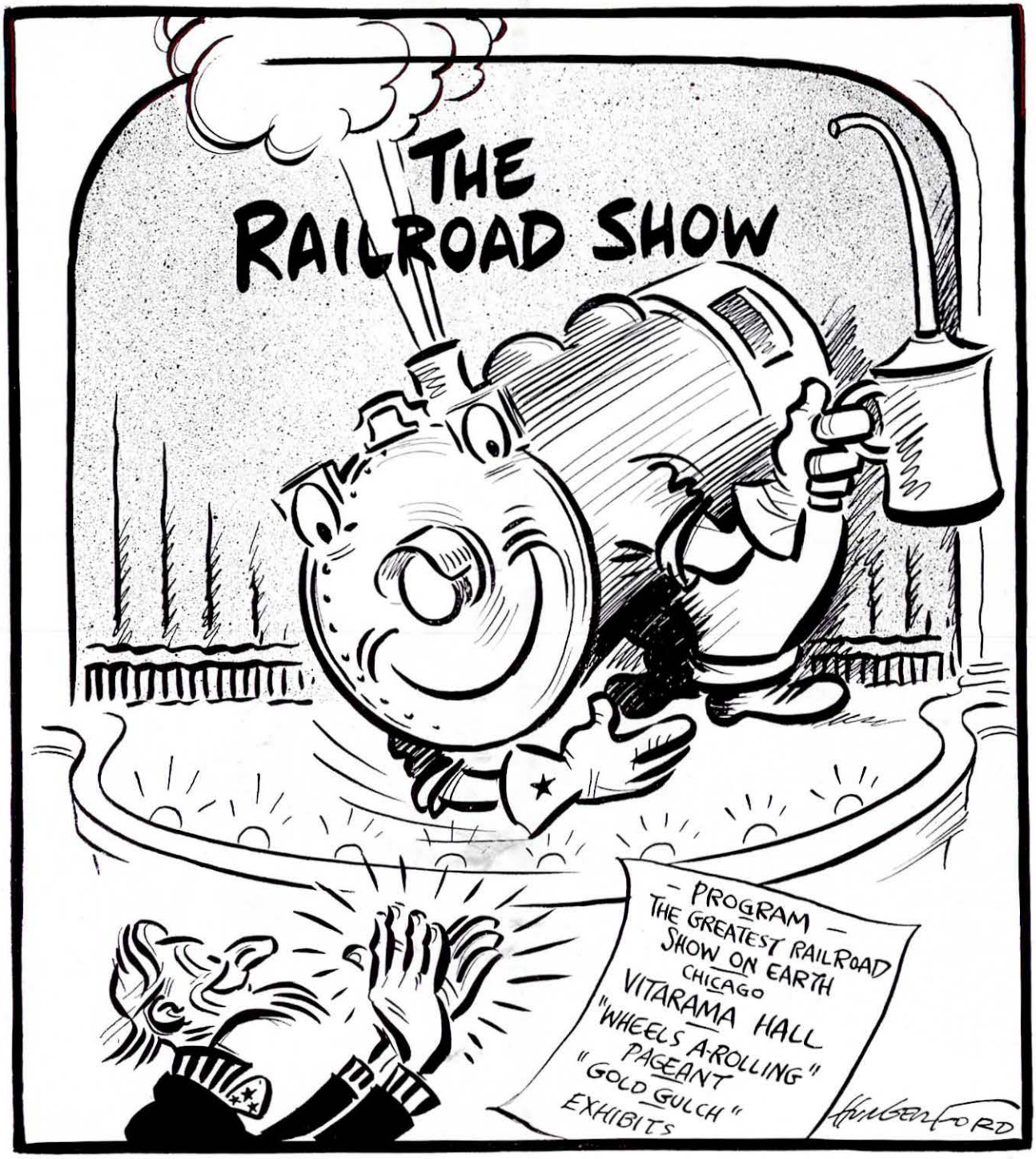
2764

Over 98% of the cars in freight carrying service are A. A. R. construction and over 96% have Friction Draft Gears.

Cardwell Westinghouse Co., Chicago
Canadian Cardwell Co., Ltd., Montreal

He Certainly Deserves a Great Big Hand!

By Hungerford



Watch for other railroad cartoons by Mr. Hungerford

A cut of suitable size may be obtained at cost by anyone wishing to reproduce the above cartoon.

Address requests to:

Edgewater Steel Company
P. O. Box 478, Pittsburgh 30, Pennsylvania.

SOUT

HERN

During July Budd delivered the first five all-stainless steel coaches to Southern Railway System of an order which includes nine diners, nineteen coaches and six coach-lounge cars. The Budd Company, Philadelphia 32.

Budd

TIME DOES NOT AFFECT

Streamlite HAIRINSUL

TIME—frequently called "the great destroyer," has yet to destroy STREAMLITE HAIRINSUL. Neither has it impaired its high insulating efficiency.

Time after time, all-hair insulation, removed from refrigerator cars after 20 or more years of service, has been reused in new cars without need for further processing.

Here are some of the many acknowledged reasons why STREAMLITE HAIRINSUL is the leading car insulation. Complete data will be sent upon request.

LOW CONDUCTIVITY. Thoroughly washed and sterilized, all-hair heat barrier. Rated conductivity—.25 btu per square foot, per hour, per degree F., per inch thick.

LIGHT WEIGHT. Advanced processing methods reduce weight of STREAMLITE HAIRINSUL by 40%.

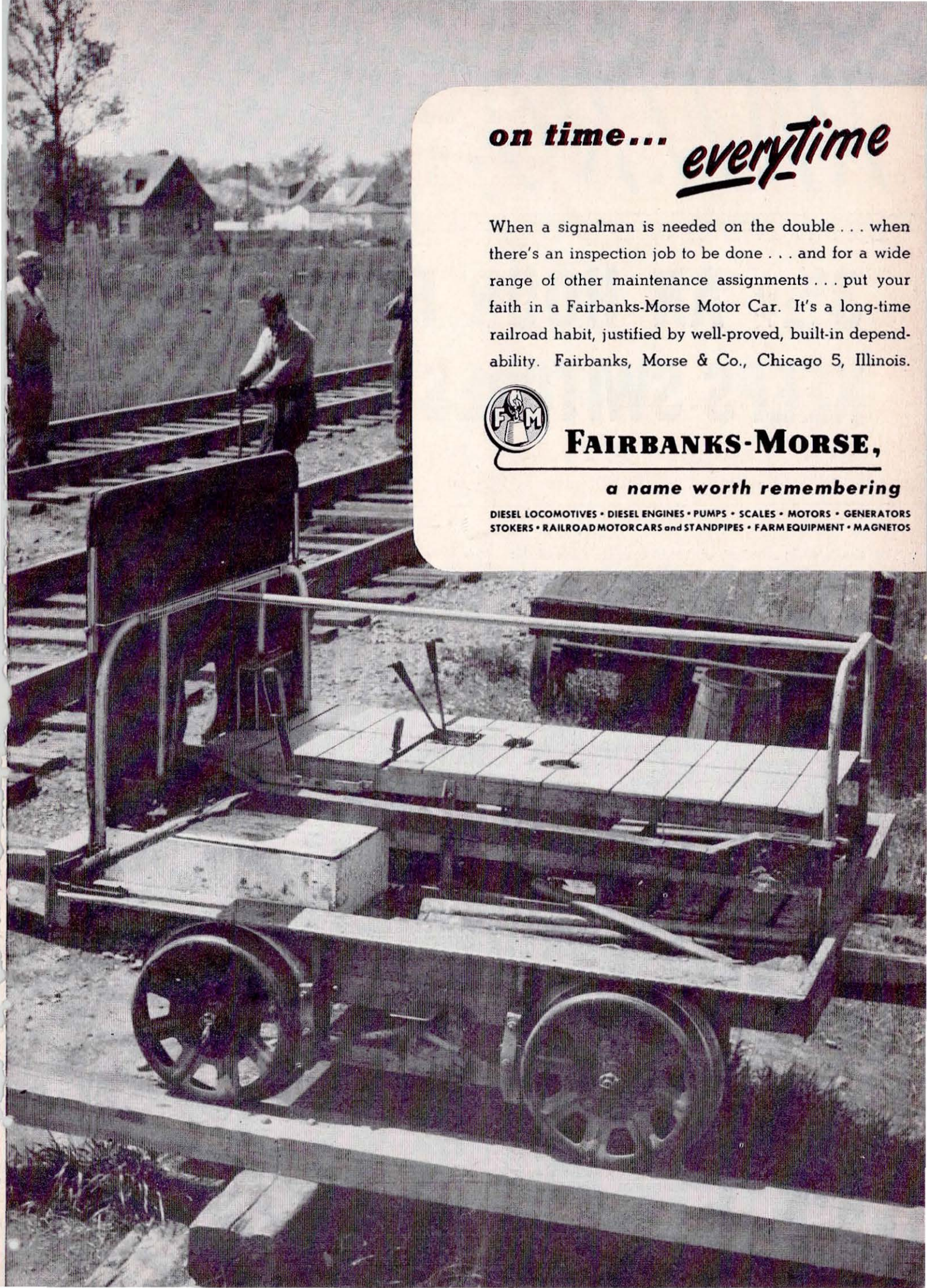
PERMANENT. Does not disintegrate when wet, resists absorption. Will not shake down, is fire-resistant and odorless.

EASY TO INSTALL. Blankets may be applied to car wall in one piece, from sill to plate and from one side door to the other. Self-supporting in wall sections between fasteners.

COMPLETE RANGE. STREAMLITE HAIRINSUL is available ½" to 4" thick, up to 127" wide. Stitched on 5" or 10" centers between two layers of reinforced asphalt laminated paper. Other weights and facings are available.

HIGH SALVAGE VALUE. The all-hair content does not deteriorate with age; therefore has high salvage value. No other type of insulation offers a comparable saving.

Dept. H98 Merchandise Mart Chicago 54, Ill.



on time... *everytime*

When a signalman is needed on the double . . . when there's an inspection job to be done . . . and for a wide range of other maintenance assignments . . . put your faith in a Fairbanks-Morse Motor Car. It's a long-time railroad habit, justified by well-proved, built-in dependability. Fairbanks, Morse & Co., Chicago 5, Illinois.

FAIRBANKS-MORSE,

a name worth remembering

DIESEL LOCOMOTIVES • DIESEL ENGINES • PUMPS • SCALES • MOTORS • GENERATORS
STOKERS • RAILROAD MOTOR CARS and STANDPIPES • FARM EQUIPMENT • MAGNETOS

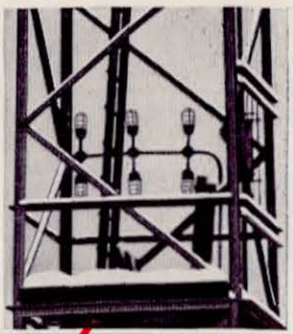
RAILROADERS"

3½¢ AN HOUR FOR POWER KEEPS SWITCHES SNOW-FREE

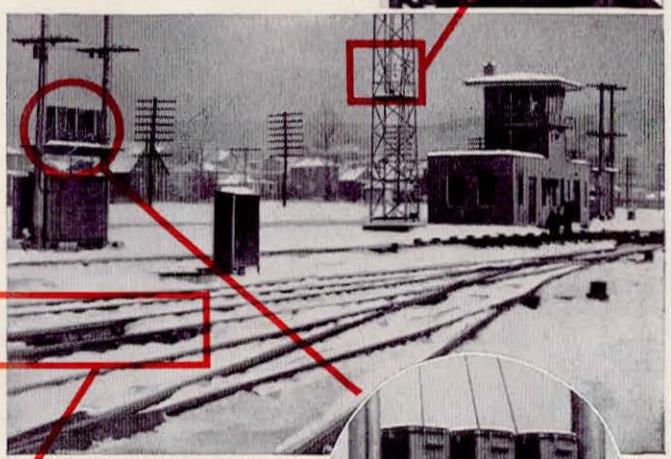
General Electric Calrod Snow Melters conquer snow easily, economically in B&O yards at Willard, Ohio.

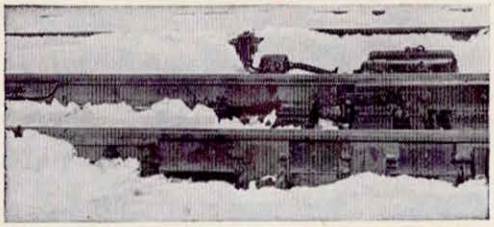
Yes, that's all it cost last winter to operate each of the G-E Calrod heaters that kept 112 switch points clear of snow and ice in the B&O classification yards at Willard, Ohio. These snow melters—part of a 2-million dollar yard modernization program that also included car retarders, power-operated switches, and floodlighting with photo electric control—played a major role in enabling the Willard yards to classify 2,300 cars per day smoothly and efficiently throughout the winter. 38,062 kwh were used at a total cost of $608.99—or an average of 3½ cents per switch point per hour of storm!

If you, too, want to combat snow the easy, electrical way, then get ready for next winter's storms by installing G-E Snow Melters *now!* We'll be glad to help you make a survey for a complete system that meets your needs. For detailed information on G-E Calrod Snow Melters check Bulletin GEA-2719. *Apparatus Dept., General Electric Company, Schenectady 5, N. Y.*

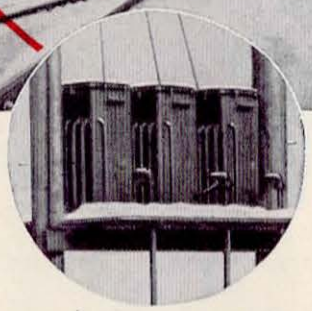


A glance at these indicator lamps tells the control tower operator whether the snow melter circuits are off, on low heat, or on high heat. Snow melters are easily adapted to automatic control, and do not interfere with the track circuits of signals.





G-E Snow Melters are easy and inexpensive to install, require practically no maintenance. They generate and dissipate heat right at the movable point.



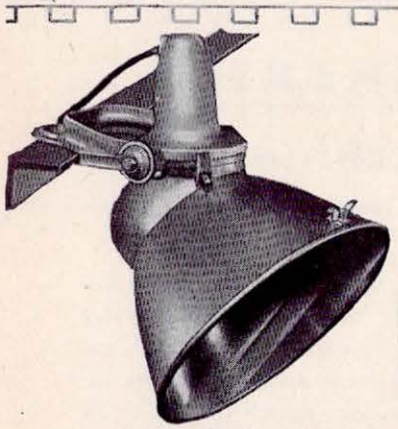
Three of the power distribution transformers used by the B&O. These transformers are rated 100 kva, 7200/12470—240/460. Together with another bank of three 200 kva transformers, they provide plenty of capacity for the 850 kw connected snow melter load.

You can put your confidence in—

GENERAL ELECTRIC

DIGEST

News and notes about
GENERAL ELECTRIC products
for the railroad industry



GOOD LIGHTING

speeds after-dark traffic

Darkness needn't mean a slowdown of operations in your yards if you have General Electric's type L-69 floodlights on the job. They put plenty of light right where you need it, eliminate blinding glare and deep shadow—the two most common causes of inefficient night operations. Good yard lighting also makes it easier for retarder operators to see switches, cars, and trackage—helps them judge speed and distance accurately. The L-69 floodlights give you high-efficiency lighting—and at the same time, lower initial, replacement, and maintenance costs. Write for further information.

UNIT SUBSTATIONS

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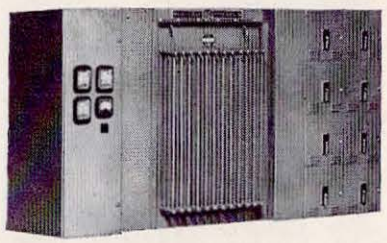

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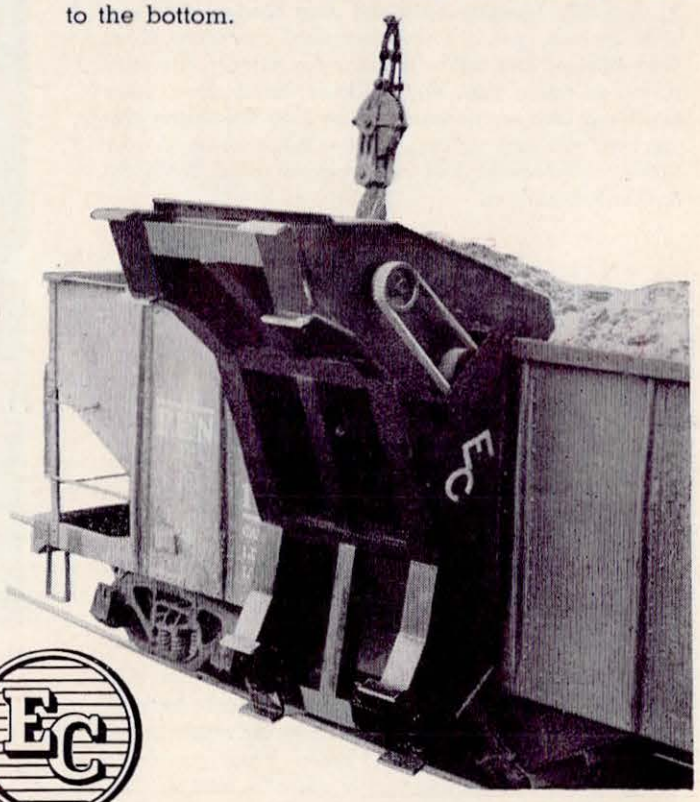

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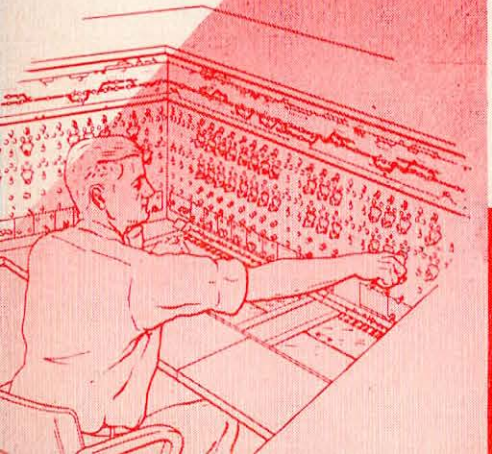

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WEEK AT A GLANCE

CALCULATION CALLED FOR: When railroads buy Diesel-electric switchers they regularly assign them to spots where they will be in service continuously, both because they are so easily adaptable to such schedules and because it is generally poor economy to let expensive property stand idle. But there is a limit to the number of 24-hour-day jobs, and on some roads that limit appears to be looming near, if it has not been reached already. There are circumstances, however, where it can be demonstrated in dollars-and-cents terms that there is greater economy in placing Diesel switchers in spots where they can work only two shifts, for example, than there is in continuing old steam power in service at out-of-line maintenance costs. This question is the subject of editorial discussion in this issue.

STOCK BOOK REPLACED: The Boston & Maine stores department has set up a card-file system for Diesel locomotive parts in which one card serves for running inventory, order record and application record. The use of this system is described in the illustrated article on page 41.

A MILLION FOR MODERNIZING: Our illustrated description (page 32) of what amounts to a new passenger station, so far as the traveler is concerned, at Roanoke, Va., emphasizes the care with which convenience, comfort and attractiveness were blended in applying current "functional" architectural principles in modernizing a sound and suitably located building—one in which the community can take justifiable pride, particularly because the million dollars expended in the rejuvenation operation did not come from the taxpayers' pockets.

PAINLESS PERSUASION: It makes quite a bit of difference, when it comes to getting the customers in the right place at the right time, if the right place is more convenient for them than the wrong place. A demonstration of this principle is reported in this issue (page 44). By changing the location in the train of the dining car with respect to a couple of sleepers, the roads operating the busy "California Zephyr" were able to divert a lot of beverage consumers from the buffet car up forward to the lounge in the stern, leaving the buffet available for the snack and light-meal service it was chiefly intended for.

NO WINNERS: Of all the consequences of the socialization of the British railroads that were predicted a couple of years ago, those that are so obvious now were far from being most conspicuous. Of all classes, railroad employees expected to "benefit" most from government control—under which they thought all the "profits" that had been going to the greedy and inhuman capitalists would come their way. This expectation proves to have been based on a slight miscalculation, and the result is—as our leading editorial points out—discontent and unrest among the ranks of railroad labor. But the employees are not alone in grumbling.

SAD AWAKENING: The "public"—at least that substantial part of it that derives no great satisfaction from thinking for itself—also had been led to believe that everything that was wrong about the British railroads would soon be made right by the magic influence of bureaucratic supervision. Now, after 20 months of disillusionment, the public seems to be changing its mind. Customers, taxpayers, former owners—all evidence some tendency to wonder if they have "been had." Perhaps the paradox of the whole unification story to date is the position of management—originally almost alone in opposing state ownership, now almost alone in adapting itself to the new order of things and trying to reap some good from it.

ENOUGH CARS NOW: Checking up on the supply of freight cars available for loading, Car Service Division Chairman Gass finds the situation pretty generally satisfactory. Even in the grain belt the peak demands of harvest time are being met reasonably well, and car shortages are relatively temporary and local, with turn-around time up to 16.84 days, as compared to 13.88 last year. A full review of his current report on the transportation situation appears in the news.

MOVING THE MAIL: Not every large terminal has platform arrangements so adaptable to the use of portable belt conveyors as the Illinois Central's Central Station in Chicago, but the opportunities for making man-hour savings and speeding the movement of mail, especially parcel post, are substantial wherever such installations are feasible, as that road's experience shows. Details appear in the illustrated article on page 45 herein.

STEAM-POWER'S VERSATILITY: Before nationalization the four principal British railroads followed the practice, not peculiar to that island, of building steam locomotives more or less tailored to fit the particular operating characteristics of the line or territory to which their assignments were limited. With the institution of one system spreading over the whole country it became obviously desirable to reduce the number of locomotive types and standardize designs to the extent that efficient performance would permit. The first step toward that widest practicable engineering standardization was to make comparisons, under controlled conditions, of the behavior in service in various regions of the best locomotive types developed by the privately owned lines. The results of some of those tests—which in brief showed that all the selected locomotives could handle trains on schedule on routes differing widely from those they were designed for—are summarized this week on page 38.

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Little Good and a Lot of Bad In Socialization of British Railways

"That which does the most good for the most people" is a rough-hewn pragmatic test of progress with which most Americans would agree. On this score the 20-months' old British experiment with socialized railroads would appear to have failed. In recent conversations with a wide range of Britons of all social classes, an experienced member of this paper's editorial staff was unable to find *anybody* who really liked what had occurred—and he encountered few who had much hope that socialization of transportation is *ever* going to accomplish anything good.

Labor Dislikes Utopia

Obviously, those elements of the British electorate which supported the party favoring nationalization of the railroads hoped to better themselves by the process. Yet, now that ownership and operation of the British railways have been vested in the government for almost 20 months, there is no cheering at all from anybody. On the contrary, there are many grumbles, and only a few apologetic mutterings in defense of what has occurred. The fact that socialization has, up to now, failed to please anybody except maybe a few doctrinaire socialist bureaucrats whom our editor did not meet, would seem to insert a large round goose-egg in the score box.

On the theory that the fellow who most loudly demands a thing is the most sincere judge of its value, our observer was careful to sound out a wide range of British railroad employees. Their unions have, for almost half a century, promoted railroad socialization as a panacea for employees. Diversion of profits from railroad security-holders to "the people," they contended, would mean high wages, short hours, improved security, and better working conditions. But reality is shocking the employees into a state of discontent and unrest, making them easy prey for the local union firebrands and "wildcatters." The more sober employees now insist that they never thought much of nationalization in the first place; the remainder say, in effect, "We was robbed."

The unions' discontent with the process of socialization has been deepened rather than assuaged by the fact that the former head of the National Union of Railwaymen, John Benstead, was named as one of the four full-time members of the new Transport Commission set up to rule socialized transportation in all its forms. Mr. Benstead, it seems, being now a part of management, has begun to think and act accordingly; and he warns his former union constituents against believing that the British public can be regarded as "a milch cow from which higher and higher rates and fares can be exacted." W. B. Allen, former general secretary of the Associated Society of Locomotive Engineers & Firemen, is now one of the six full-time members of the "Railway Executive" (which operates the approximately 20,000 route-

miles of British railways, under overall policies laid down by the Transport Commission), and has departmental charge of wages, working rules and employee welfare.

Many railroad operating officers say, privately, that Mr. Allen is doing a good job and is "taking the large view of things." Still other union leaders, as they have been absorbed in government or in the management of nationalized industries, have had to revise their loyalties as have Messrs. Benstead and Allen. The government is no longer, for political reasons, on the side of unions' demands. Worse for the unions, it isn't even neutral; it's on the side of the new socialist management.

Few "Make-Work" Jobs

British railroad employees, on the average, earn about $25 a week. There is little featherbedding of the type common in North America. For example, while our Diesels carry an idle "fireman" and the unions demand still another, the few Diesels in Britain are manned by only one employee—the engineer. Trains carry but one trainman, who is a brakeman and not a conductor. Yet a recent demand by the National Union of Railwaymen for a wage increase of about $2 a week was turned down cold by a government arbitration board with a single-sentence report that said, merely, "No."

Clearly, socialized railroads haven't paid off for organized labor.

How about the railroads' customers? Since the British are the world's greatest train riders, almost everyone in the country is personally interested in railroad passenger service. Instead of applauding what has been accomplished since nationalization, most Britishers, even without being questioned, damn their railroads' performance vociferously.

The socialized management has continued the pre-nationalization policy of restoring such prewar amenities as excursions, dining cars, reserved seats and sleeping-car trains as fast as physical means allow. With the notable exception of car and station cleaning, which is almost totally neglected, adequacy of equipment, schedule frequency and timing, and traffic promotion programs have continued to improve under socialization. But the public still remembers the days of 1939 and before, when British railroads were "hot shot" passenger carriers, and they aren't happy with the quality of service today. Many of them say the improvements would come faster if the old private managements were forced to go out and get customers and were allowed to spend their fund of more than $400 million, representing war-deferred maintenance. This fund the railroads had accumulated before nationalization, but it still remains unexpended; and the undermaintenance persists.

The British "trader" (i. e., shipper or receiver of freight) has never wielded the "traffic club" over his railroads, as his counterpart in America has sometimes done. But he did demand, and get, some attention to his needs, not only because railroad officers had to live with him socially, as a neighbor, but because, at important points, there still existed a measure of inter-railroad competition and because he could divert his traffic to trucks.

Competition between railroads is now dead. According to the new law, rivalry between the railroads, on the one hand, and common carrier trucks (also in process of nationalization) ought also to be dead; only the ingrained habit of the managements of the two forms of transportation keeps alive a kind of "black market" rivalry in service. It is true that the shipper may still resort to private trucking; indeed, he is showing his appreciation of nationalized public transport by buying his own trucks at an unprecedented rate. But this weapon is in constant danger of "liquidation" at the hands of the government. The Minster of Transport has recently uttered a thinly veiled threat to this effect.

No Bargains in Rates

But, some may hope or believe, British passengers and shippers will, at least, get low rates out of nationalization—like the customers who buy electricity in America from T.V.A. They haven't yet. Both fares and freight rates are up 55 per cent over 1939. With much lower personal incomes than those prevailing in the U. S., the British passenger now pays a basic, one-way fare of five cents a mile, third class. The per-ton-mile freight rate is about three times that in the States. Short distances and high terminal costs have much to do with these rates, and there is no evidence that they are unduly high, in relation to actual costs. But it is also clear that customers of the British railways are getting no bargains. And since the law states that, taking one year with another, the nationalized transport enterprises must be self-supporting—and since the railroads, in 1948 at least, are estimated to have lost between $80 and $120 million—the customers are not likely to receive any rate bargains in the future.

Despite the law's mandate with respect to self-support, the nationalized transport industry may have to dip into the public treasury for funds to enable it to keep going. Even if it doesn't, the British taxpayer has still lost the relief he might have expected from the heavy income tax payments which certain, at least, of the private companies would have made to the country's exchequer. While the nationalized railroad system still pays property taxes on the old basis to the local political bodies—with complete merger of the railroads and bus and truck enterprises into one national, socialized whole, continuance of this local tax contribution will doubtless be eliminated. So, Mr. Taxpayer gets no benefits from profits; he may have to absorb losses; and he will have to assume tax burdens the railways formerly shouldered for him.

Did the owners of the former railroads gain any-

thing? They got a modicum of security, because the 3 per cent Transport stock they received is guaranteed by the government. But whatever private railroad securities they formerly held, their income is now substantially less than it was before nationalization and they are cut off forever from enjoying any increases that might have resulted from corporate revival akin to that of our own Cotton Belt or Rock Island roads.

Management Has to "Sell" Labor

It is ironical that the management of the nationalized railroads—which, in most instances, is the same personnel in about the same jobs that ran the old companies—is now the chief crusader for the success of the scheme. Having fought hard against the nationalization legislation, and having lost the battle honorably, management has accepted to task of making "British Railways" tick, without reservation. It is management which is trying to persuade the employees—who wanted nationalization but don't like it now they have it—to cooperate in the plans for increased mechanization, abandonments of redundant facilities and more efficient methods which, they foresee, will cheapen and better railroad service.

But, despite their dedication to the new order, British railroad officers are, in general, bewildered; and have less incentive to be ambitious than they would have under private ownership. Unification of the four main line companies is destroying the sense of company loyalty and service competition, as well as cutting off traditional lines of promotion. Officers retain their former salaries, but see signs that new jobs and new incumbents will suffer lower pay, in line with civil service practice. And severe restrictions by the government on capital expenditures are cutting off, not only long-term improvements, but even many projects which the old private companies were prepared to undertake or already had under way.

Labor, customers, taxpayers, owners and management—all find socialization of the British railroads disappointing or downright bad. How, then, can the socialists claim to have accomplished, in this instance, anything good or useful, on the acid test of "the greatest good for the greatest number"?

TWENTY-FOUR, OR SIXTEEN?

Since the first Diesel-electric switching locomotives began to replace steam power in any great number, it has been recognized that, because of their high first cost, the Diesels should be put on jobs where maximum utilization could be obtained. In most cases, this has meant jobs where the locomotives can be worked on three shifts, for a maximum of 24 hours a day. The chances are that a major portion of the more than 4,000 switching units now in service are working around the clock.

The replacement of steam power by Diesels for switching seems recently to have reached a peak. Independently of fluctuations in locomotive orders which may occur because of business conditions, future installations of Diesel switchers may slow up as a result of a dearth of 24-hour jobs to put them on, as well as because an increasing ratio of the remaining 5,000 or more steam switching locomotives comprise relatively modern power. It appears, then, that the railroads may have reached a point where they will have to explore the possibilities of effecting economies in connection with the use of Diesel power in directions not heretofore too seriously considered.

One question worth bringing out for discussion is the matter of engine-terminal operating costs. There are many terminals in this country that once dispatched substantial numbers of steam locomotives, and which are now retained in service on a greatly reduced basis, primarily for servicing a small number of steam locomotives. In some cases the greater part of the remaining dispatchments of steam power are switchers. Unfortunately, at many terminals, as the steam units have been replaced by Diesels it has not always been possible to curtail the use of the steam-locomotive servicing facilities in proportion, so that now the engine-terminal expense for servicing steam power is definitely out of line with the declining number of units to be serviced.

The specific question that should be asked is whether or not a thorough study of the operations at many terminals might not disclose the fact, for example, that a road could effect substantial economies now by installing a few more Diesel units, even on a 16-hour-day basis, and wiping out the steam facilities completely. A further point is that the study would in any event point to the desirability of modernizing the terminal facilities even if the use of steam power is continued.

Urges Rate-Policy Change

Return of a buyers' market for transportation, as for other things, calls for a change in pricing policy.

Horizontal changes in freight rates may be feasible in a sellers' market. They do not fit the keen rivalry that has returned to the field of transportation today.

Through selective changes in rates, as well as through increased efficiency and modifications of service, the railroads should be able to cope with the less favorable conditions that now prevail. They will require the cooperation of regulatory authorities and shippers in working out such selective rate adjustments on a sound basis.

—The New York Journal of Commerce

The exterior of the remodeled station is dominated by a portico of gray limestone, reflecting the colonial atmosphere of Virginia. Behind the portico is a ceiling-high window which forms the north wall of the waiting room

STATION REMODELED ON FUNCTIONAL LINES

Structure on the Norfolk & Western at Roanoke, Va., completely modernized at a cost of $1,000,000, has many attractive features—New interior treatment emphasizes the standard colors of the road

The station interior is decorated in dark red and gray—N. & W. standard colors. In the waiting room, shown here, the walls are of small squares of gray tile, while the floor is of reddish terrazzo

The Norfolk & Western, at a cost of $1,000,000, has completed the modernization of its passenger station at Roanoke, Va., headquarters of the road, and a key point in its passenger-train operations because of the size of the city and also because several of its important lines converge at that point. The project, which included the complete remodeling of the main station building and the construction of a new concourse, was under way for more than a year. All work was done "under traffic," which called for some areas to be completed before work could be started in others.

In redesigning the station, the architect, Allmon Fordyce, of Raymond Loewy Associates, New York, has obtained a highly attractive, yet completely functional design, incorporating in the interior color scheme the dark red and gray standard colors of the N. & W. The remodeled exterior of the main building retains the somewhat colonial atmosphere of the earlier design, but now features a much wider portico of plainer but equally attractive appearance.

An unusual feature of the interior design is the use of a perspective effect, obtained by arranging the floor plan of the waiting room and concourse in the form of a large trapezoid, with the larger base forming the north, or main street entrance, wall of the waiting room, while the shorter base is the south, or far, wall of the train concourse. This, coupled with the fact that the floor level of the concourse is 1 ft. 6 in. higher than that of the waiting room, emphasizes the perspective and gives the impression that the two rooms — 136 ft. overall in depth — are considerably larger than is the case.

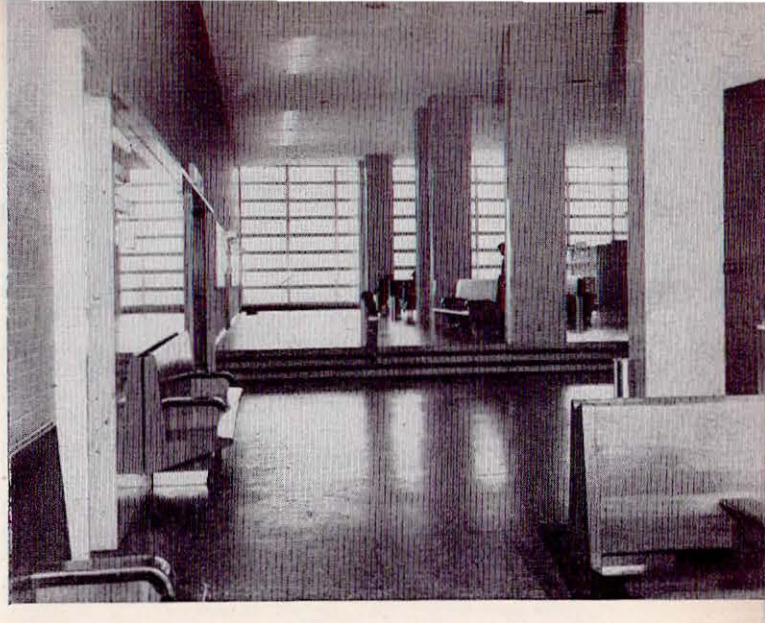
An outstanding feature of the new work is the concourse, which extends over three station tracks. The exterior sides of this structure are faced with corrugated aluminum and include large window areas, while the south end, 69 ft. wide and 16 ft. 8 in. high, is entirely of glass, set in aluminum sash.

Structure Nearly 50 Years Old

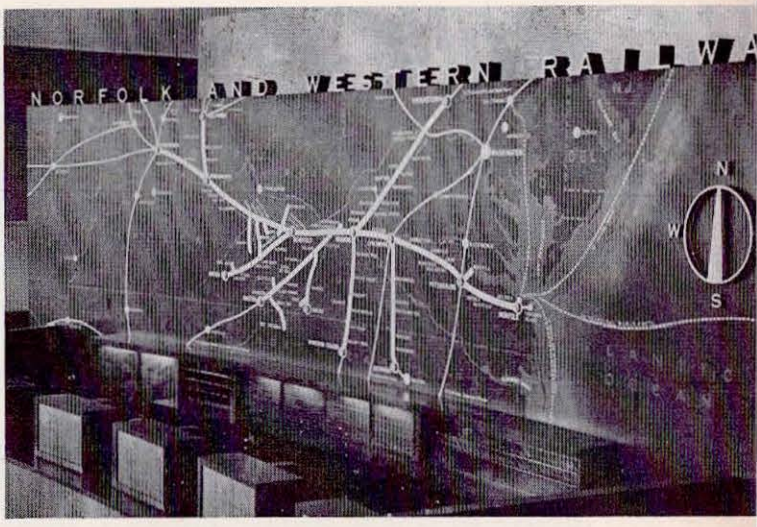
The station was built around the turn of the century. It is a brick and steel structure, located on the slope of a low hill north of the tracks — a situation which called for a two-level layout, with a concourse over the tracks. From the street, the station appeared as a predominately colonial structure, with a large central section, directly behind a classic portico, flanked on each side by lower rectangular wings.

Entry to the main building was from the portico through doors which opened into the main waiting room, which contained the ticket office. This room was 40 ft. by 80 ft. in plan and was finished with plaster walls and ceiling, mahogany wainscoting and molding, and wood floors. The ticket office, of the familiar bar-red-window type, projected into the room from the south wall. Openings on each side of this office provided entrance to the former concourse. East of the waiting room was a large dining room that in recent years had been used for storage, while on the west side were the lounges and toilets.

The old concourse, 53 ft. wide, was of steel construction and extended directly south from the main building, being offset slightly to the west of its center. It contained a newsstand, a few benches and the train gates leading to the platform stairways. An in-



Looking from the waiting room into the concourse. The far wall of the concourse, 69 ft. long by 16 ft. 8 in. high, is entirely of translucent glass, there being 96 panes set in aluminum sash



The most striking decoration in the waiting room is the map of the N. & W. system, done in colors on a background of red Formica, which is mounted above the ticket office

This schedule board is composed of removable strips of red Presdwood held in place by aluminum molding. Lettering of the individual strips was done by a silk-screen process for greater legibility

closed steel-framed balcony, extending along the track side of the main building, provided a means of reaching the men's toilets and the baggage room, these being in the west wing of the station.

The lower, or track, level of the station contained a number of rooms, including the stationmaster's office, a telegraph office, trainmen's rooms, a mail room, an ice-storage room, and rooms for other miscellaneous purposes. The entire building was heated by steam from the shop power plant nearby.

While the station was entirely adequate, the N. & W. had felt for some time that it was no longer in keeping with the generally high standard of service offered its patrons, nor in step with the modern, growing city that it serves. Delayed by the war, the modernization work was started as soon as the road was assured of a dependable supply of materials to enable it to carry out the work.

The principal exterior changes involved the removal of the old portico and the construction of a new one—somewhat wider and less ornate, and highly attractive in appearance. The new portico, 82 ft. wide, has eight rectangular columns of grey limestone, supporting a plain cornice faced with the same material. The words "Norfolk and Western Railway" in cut-out gold-leafed aluminum letters appear along the front of the cornice. Other exterior changes included the removal of the old cornices from the remainder of the structure, replacing them with new ones conforming with the portico design, and the installation of new stone trim at all windows and doors.

Otis escalators are provided at each of the two track platforms for the convenience of incoming passengers. Departing passengers use stairways between the concourse and the track level below

Attractive Waiting Room

As in the earlier design, the doors from the portico open directly into the waiting room, which is 78 ft. wide at this face, 75 ft. wide at the south end, and 41 ft. deep. Two features of this room are particularly striking, one being a window wall, 18 ft. high, of the Pittsburgh Plate Glass Company's "Twindow," which forms the front wall of the room, directly behind the portico. The second feature is a large map of the N. & W. system, done in colors on a background of red Formica, which is mounted toward the south wall of the room, above and behind a modern ticket counter.

The walls of this room are faced with two-inch squares of gray Sparta tile, trimmed in gray marble, while the floor, as in the remainder of the station, is of reddish terrazzo. The ceiling of this room and the concourse is of acoustic plaster, painted canary yellow. Near the center of the waiting room ceiling is a dome-shaped recess, 21 ft. in diameter, painted white and indirectly lighted by cold-cathode tube lamps. Incandescent Down-lites, recessed into the ceiling, provide general illumination elsewhere in the room.

A wide opening in the west wall of the room leads into the white women's lounge while another opening in this wall leads to an alcove containing public telephone booths. A similar opening on the east side offers passage to the lounge, toilet rooms and lunch room for colored patrons.

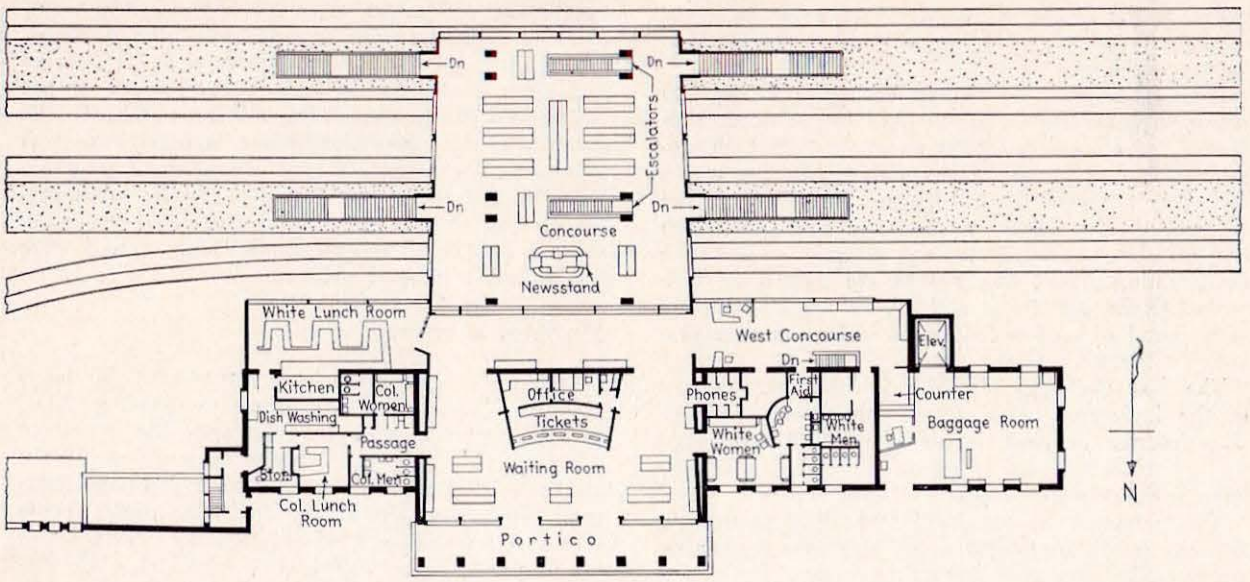
A Plexiglas clock face, 5 ft. in diameter, with aluminum hands and figures, is mounted 6 in. in front of the east wall of the room, near the front window wall. To balance this decoration, scale models of the N. & W.'s modern Class J locomotive and a Class J locomotive of 1890 are mounted on the west wall.

Ticket Office Details

The ticket office, centered on the south side of the waiting room, contains six ticket windows of the open-counter type, designed to create a more informal atmosphere between patrons and ticket clerks. Extending 20 ft. 6 in. into the room from the south wall, the office is trapezoidal in plan, the shorter base, slightly concave, rather than straight, forming the counter proper.

The counter is faced with Formica Realwood in a quartered walnut finish, while above the main counter level are a series of panels of this material, 19 in. high, with openings between them to form the six ticket windows. Small doors, also of Formica Realwood, are provided at each opening, to be closed when the window is not in service. The deal plate at each window is of stainless steel.

Along the rear of the ticket selling area is a working counter for the ticket clerks, and behind this counter is an inclosure containing a private office for the ticket agent, a work room, and a wash room for the ticket clerks. The inclosure is formed by panels of Formica, 11 ft. 5 in. high, the sides being of red For-



Plan of the remodeled station, showing the new interior arrangement

mica, while the front panel, rising from directly behind the working counter, is also of red Formica and contains the map of the N. & W. system mentioned earlier. Concealed spotlights in the dome of the waiting room ceiling illuminate the map; other spotlights in the dome provide working light for the ticket counter.

The east wing of the station contains the lunch rooms for white and colored, and also the toilet facilities for colored patrons. The toilet facilities for white customers are in the west wing, which also contains a first-aid room and the baggage room, the latter being in the extreme west end of the structure.

The walls in the white lunch room are faced with green Sparta tile, while the ceiling is of corrugated Transite painted a matching green. The walls in the colored lunch room are faced with tan Sparta tile on three walls and red Sparta tile on the wall adjacent to the kitchen. The counters in both lunch rooms are of Formica.

The women's lounges are unusually attractive. Each contains one or more vanity tables, a writing desk, large mirrors and comfortable chairs and sofas, and each is finished in pastel colors. Special lighting fixtures are provided and the chairs and sofas have foam rubber cushions and are covered in durable material in colors that harmonize with the color schemes.

The baggage room has also been remodeled with new plaster ceiling and side walls above a new ceramic tile wainscot. For more efficient and prompt handling of passengers' baggage, a new counter, office, and baggage racks have been installed.

Attractive Concourse

Entrance to the train concourse is gained through wide openings on each side of the ticket office. This room is 92 ft. in length and, as already mentioned, is trapezoidal in shape, being 75 ft. wide at its waiting room end and only 69 ft. wide at the south end.

The south wall of this room is composed of 96 "Twindow" units, held in a network of aluminum frames, the glass being the Mississippi Glass Company's "Hylite" — a translucent material, selected instead of clear glass to shut off the view of industrial buildings south of the station. The side walls of the concourse have continuous clear glass "Twindows," all of which have in-swinging sash to permit their being washed from the inside.

The gray and red color scheme of the waiting rooms is carried into this room also, the floor being of reddish terrazzo, while the walls are of gray tile trimmed with gray marble. The north wall of the room, between the openings leading from the waiting room, is also faced with gray marble. This wall contains a large train information board composed of numerous short strips of dark red Presdwood, held in place by aluminum molding. Pertinent information relative to train schedules is lettered on the strips by means of a silk-screen process to render them highly legible. The strips may be removed for relettering when necessary. The board is illuminated by spotlights in the ceiling of the concourse.

An unusual decorative feature in the concourse is the use of Slim-line fluorescent lamps, 96 in. long, mounted behind screens of corrugated Plexiglass and recessed into the sides of roof-supporting columns. These light panels, which extend down from the ceiling level, are equipped with aluminum reflectors. The Plexiglass screens are formed and attached to the reflectors in such a way as to facilitate cleaning and the replacement of the Slim-line lamps.

Other decorative features in the concourse include a large reproduction, in terrazzo, of the N. & W. insignia and of a compass rose, set in the floor, just inside the openings from the waiting room.

New wooden benches have been installed in both the waiting room and concourse. Made of walnut with a natural wood finish, these benches are designed for comfort as well as for long service. The design is

based on the results of recent studies made to determine the types of seating best adapted to the shape of the human body.

Four train gates — two on each side — lead to stairways from the concourse level to the track platforms. Red enameled, cut-out numerals, 2 ft. high, appear beside each train gate to designate the tracks served by the gate. These numbers, in each case, are mounted directly above an aluminum frame, in which a destination board may be inserted prior to the time of departing trains. The boards are lighted by concealed fluorescent lights and are of sheet aluminum painted red with white lettering. Similar signs are provided at the track level.

The four stairways are fully inclosed, the exterior of the inclosures being faced with sheet aluminum. The interior of each inclosure is lined with gray terrazzo to a wainscot height of three feet, with aluminum-sash windows above this level.

The stairways are for use by departing passengers. Otis escalators are provided for incoming passengers, rising to the interior of the train concourse. One escalator is provided for each platform, located about midway between the two stairways serving each platform. The escalator wells are lined with 2-in. squares of dark gray Sparta tile. The space beneath the stairways on both platforms is inclosed in brick, and these enclosures are extended along the platforms, beneath the full width of the concourse, to include the escalator wells.

The lower level of the station building was also extensively remodeled to obtain a more efficient arrangement for the various activities carried out on that level. This work included the installation of fluorescent lighting in all rooms, except those used for storage, and the installation of modern plumbing fixtures and lockers in the trainmen's rooms.

Radiant Heating System

Radiant heating is employed throughout the main floor level of the station, except in the toilet rooms, the baggage room, and the kitchen serving the two lunch rooms. More than 9,000 ft. of the Bethlehem Steel Company's Rayduct pipe was used for the heating coils. The pipe coils were laid directly on the concrete subfloor, after which the subfloor was covered with a 2½-in. layer of lightweight concrete. The terrazzo wearing surface was then applied. Direct radiation is employed in all areas of the station not heated by radiant heat, except in the baggage room, where unit heaters are installed.

The heating medium for the building is hot water, heated in a heat exchanger by steam from the shop power plant. This unit, together with pumps for circulating hot water through the system, is located in a room on the lower floor of the building.

The entire upper level of the structure is air-conditioned without cooling. The air-conditioning equipment is located in the same room on the lower level which houses the heating equipment. Provision has been made for the ready installation of a cooling system if this should be desirable in the future.

As part of the project, the passenger platforms were completely resurfaced with bituminous material and new flush-type water-service boxes were installed along each platform, the latter being designed to minimize the danger of contamination of drinking water supplied to coaches. Prior to resurfacing the platform, new piping was installed, including a 3-in. steam line along each edge of each platform, with outlets at intervals for heating parked coaches in winter. The steam lines were insulated with a material known as Cell-Crete, which consists of a cement grout to which a stiff suds-like material is added. As the grout sets the air holes in the suds form an effective insulation. Electric outlets for the air conditioning of cars were also installed in each platform.

Platform Shelters

Butterfly-type shelters were constructed for each platform. These are of steel-frame construction, faced on the under side with Transite, while the edges are trimmed with aluminum. Night illumination of the platforms is by means of a series of semirecessed lights with Hollophane lenses, the individual lights being spaced at intervals of 16½ ft. along the undersides of the shelters. Built-up roofing was applied on each shelter.

The modernization of the Roanoke station was planned and executed under the general supervision of A. B. Stone, chief engineer of the N. & W., W. L. Young, assistant chief engineer, and H. F. Smith, engineer of bridges and building. E. H. Roth, assistant engineer, and J. P. Maloney, resident engineer, were in direct charge of the work.

Communication . . .

"Basic Amount" Authoritatively Defined

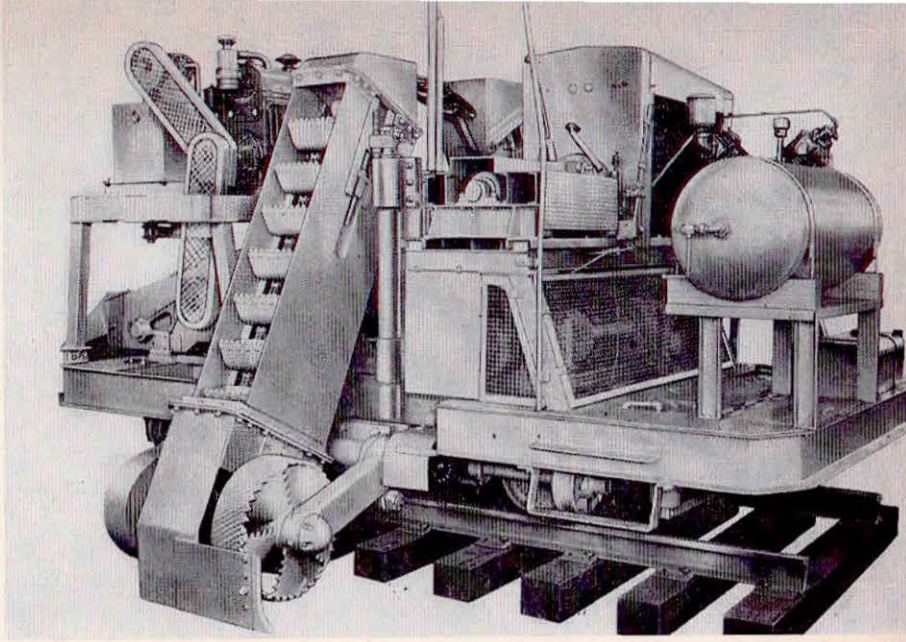
CHICAGO

TO THE EDITOR:

In the *Railway Age* of July 23, in the article beginning on page 34 entitled "Social Insurance for Railroad Employees," quoted from the Business Record of the National Industrial Conference Board, there is one rather serious error. The footnote at the bottom of the second column on page 34 reads "The amount which the deceased employee was receiving or would have received as a retirement annuity." This is given as the definition of the basic amount. This footnote should read: "A term used only for the purpose of determining the amount of survivor benefits. It is secured by taking the sum of 40 per cent of the first $75 of average monthly earnings and 10 per cent of the balance up to $250 per month, and adding to this sum one per cent of it for each year of service after 1936. The average widow's annuity is about $30."

The point is that the amount of survivor annuities has no connection at all with the amount of retirement annuities. Retirement and survivor annuities are figured by two different formulas. Therefore, what the deceased employee's retirement annuity was, or would have been if he were 65 years of age at the time he died, has nothing to do with what the survivor's benefits are.

WALTER MATSCHECK
Director of Research,
Railroad Retirement Board



Right—The power-driven rotary cutting drum loosens the ballast and delivers it to the bucket-type elevator which dumps the particles on a shaker screen. There is a cutter head and elevator on each side of the machine

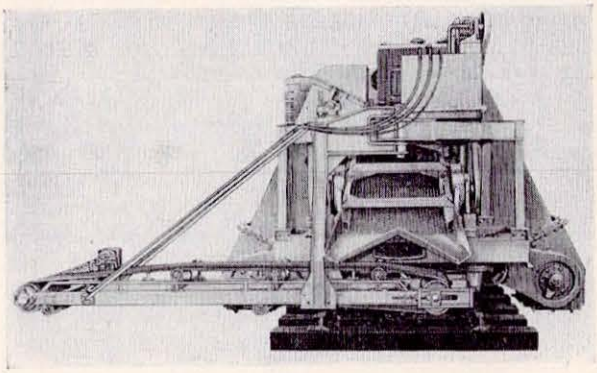
NEW Pullman-Standard Ballast Cleaner

The Power Ballaster and the Power Track Cribber, ballasting machines made by the Power Ballaster Division of the Pullman-Standard Car Manufacturing Company, Chicago, are soon to be augmented by the Pullman-Standard Ballast Cleaner which, now undergoing final tests, will shortly be in production at the company's Hammond (Ind.) plant. Thus, the machines manufactured by this company will comprise a complete ballasting team; while each serves a separate function and may be used individually, they are designed as companion units and may be operated together in production-line sequence. Manufacture of the improved Power Ballaster was taken over by the company in 1947, and the Power Track Cribber was added early this year.

Like the other two machines, the Ballast Cleaner is a self-propelled on-track unit which, by means of air-lift jacks and power-operated transverse wheels, may be readily removed from the track to clear for trains. On each side of the machine is a bucket-type ballast elevator terminating at its lower end in a rotary ballast cutter drum which loosens the ballast and delivers it to the elevator buckets. At the upper limit of their travel the buckets dump the fouled ballast onto a shaker screen, from which the cleaned particles are returned to the roadbed through two chutes at the rear of the unit, one above each rail. The foreign matter screened out of the ballast is discharged onto a belt conveyor at the rear, which is pivoted so that the material may be cast on either shoulder as desired. By means of an auxiliary elevator the waste material may, if desired, be loaded into a following car.

The cutter drums, which rotate under power as the machine moves forward, are provided with interior helical transfer vanes that help to loosen the dirty ballast and deliver it to the elevator buckets. Forward edges of the drums and the helical vanes have serrated edges to enhance their cutting power. The depth of the digging action can be regulated to suit the rail height and ballast conditions, with a depth of 3½ in. below the bottoms of the ties being recommended by the manufacturer as satisfactory to assure adequate drainage of the entire ballast section.

Below—A pivoted belt conveyor at the rear of the machine may be swung to each side for discharging screenings beyond the track shoulders



This is the same depth as recommended for the cribbing operation.

The two elevators, with their cutting drums, are lifted and lowered by air cylinders and may be quickly folded into the clear in preparation for travel or for setting off the machine. Their lower ends are attached to the chassis by means of short-radius arms in such a manner that at no time during either the cleaning or the folding operation do the elevators foul adjacent tracks. The two elevators can be raised and lowered independently of each other, permitting the ballast on either or both sides of the track to be cleaned, as desired.

The machine weighs 40,000 lb. and travels to and from the site of the work at a speed of 25 m.p.h. The main power plant consists of a 100-hp. gasoline or Diesel engine, and in addition there is a separate engine for operating the shaker screen and for operating a pump which, in turn, drives a hydraulic motor on the conveyor for waste material. All operations of the machine are air-controlled, and an air compressor is provided for this purpose.

To obtain the advantages of parts standardization the various parts of the Ballast Cleaner, insofar as possible, duplicate those of the Power Ballaster and the Power Track Cribber. The power plants, the transmissions, the controls, and the clutches are among the parts that are identical in all three machines.

British Locomotive Interchange Trials

Selected classes from each region submitted to dynamometer tests on routes in all regions — Performance consistent on all routes

British Railways, upon their formation in 1948, inherited four series of modern steam locomotive types, one from each of the former main-line companies. Although each of these series was highly standardized within a single company, hardly any features or details were common from one company to another. Moreover, the suitability of the designs for moving trains over regions other than their own was quite unknown.

In order to obtain the widest practicable benefit of engineering standardization, it was proposed from the beginning that the Railway Executive would not continue to build four varieties of locomotives for each traffic duty. Rather, it proposed a single series of about twelve British Railways standard types which would each contain the best features of existing designs and which could have improvements and developments added to them through the years as experience and ingenuity of the design staffs should indicate.

Test of Efficiency

The immediate need was to examine the best of the locomotive types already existing and, accordingly, the executive decided in January, 1948, that comparisons of the running performance of specified types should be obtained by trials in service on the line.

Of the various methods of locomotive testing that which gives the quickest general survey of capacity and economy is the dynamometer-car test. The drawbar pull, speed, and horsepower, measured by the dynamometer car, related to the coal and water consumed, are a fair measure of the overall efficiency of the locomotive.

Fourteen types of locomotives, divided among three classes of service—express passenger, mixed traffic, and freight—were each tried on selected routes on each of five regions, ranging as far north as Inverness and as far west as Plymouth. The test covered the period from April to December, 1948.

The tests were not intended to be a contest between locomotives of similar types, which it was appreciated had been designed for the most part to fulfill the requirements of their particular regions. The results, therefore, do not disclose any dramatic or unexpected features, nor is it possible to declare a "winner."

Since all the locomotives demonstrated their ability to operate the selected trains to regular schedules when operating on routes differing widely in character from the home routes, the Railway Executive is satisfied that no limit need be placed on its proposals for standardization by reason of suitability of particular locomotives for the routes over which they will have to work.

Test Arrangements

In order to expedite the testing three dynamometer cars were used simultaneously. These came from the London-Midland, the Eastern and the Great Western regions and were calibrated at Derby before the tests were started.

The locomotives were taken out of service without receiving special attention after 15,000 to 20,000 miles of service since the last general repair and there were some variations in mechanical conditions, particularly in the case of the freight locomotives.

The tests were made on selected runs on regular schedules. In the case of the express-passenger and mixed-traffic locomotives, agreed-upon tonnages were set up for each route, which applied to all of the locomotives, with the exception of the London-Midland region 6P class passenger locomotive for which reductions were made on the Western region between Paddington (London) and Plymouth and on the London-Midland region beween Euston (London) and Carlisle. The width over the cylinders of the Great Western locomotives made it necessary to prohibit their operation on certain of the selected routes.

Some changes in tenders were required to adapt the locomotives from regions where water troughs are not used to routes where water is scooped and, vice versa, to add tender water capacity on routes where there are no troughs.

Provision of Fuel

Each locomotive worked two preliminary trips without dynamometer car on each of the runs selected for the test, and made two trips in each direction with the dynamometer car. Except in one or two cases selected engine crews from the owning regions handled each locomotive on the test runs over each route.

The Austerity locomotives were operated by crews from the region on which the test was being made, and no preliminary runs were required.

On preliminary runs all locomotives used the coal normally in use on the routes over which the runs were

This article is summarized from the "Report of the Locomotive Testing Committee of the Locomotive Interchange Trials, 1948, of the Railway Executive, British Railways."

being made. For the actual tests each group of locomotives used a similar type of coal on all regions. Coal was weighed onto the tender and that remaining at the end of the test was also weighed.

The Western region locomotives had grate and smokebox arrangements specifically designed to suit Welsh coal and these, together with the firing technique to which the Western region enginemen had been trained, differed from what is customary with the types of coal used on the trials. In view of these conditions, it was arranged that, on completion of the trials, additional tests should be carried out on the Western region, using Welsh coal.

The water tanks of the tenders of the locomotives were calibrated and the level of the water in the boiler was brought up to that at the beginning of the test before the tender reading was taken.

The Locomotives Tested

The locomotives tested included five passenger locomotives, one each from the Western, Eastern and Southern, and two from the London-Midland region.*

The principal dimensions, weights and proportions of all of the locomotives tested are shown in Table I.

Table II is a summary, respectively, of the fuel and water performance of all of the locomotives tested. These ratios are obtained by dividing the total weight of coal burned and the total weight of water evaporated during all of the tests by the total work done in terms of drawbar horsepower-hours during all of the tests. A pertinent fact bearing on the adaptability of steam locomotives to lines the characteristics of which are different from those for which they were designed is the fact that the two passenger locomotives and the two mixed-traffic locomotives which showed the lowest and next to the lowest coal rates for the tests as a whole in their respective series occupied the same ratings on three of the four regions on which they were tested and their order was reversed by a fraction of a pound on the fourth region. Less consistency was shown in the case of the freight locomotives.

Adhesion and Slipping

A variable amount of slipping was experienced with practically all the locomotives concerned in the trials, particularly when starting and less frequently on rising gradients. It was not possible, however, to connect this tendency with any particular cylinder arrangement since, under certain conditions, multi-cylinder locomotives were not superior to two-cylinder locomotives. There was some evidence, however, as would be expected, that a higher factor of adhesion contributed to greater security against slipping.

For example, very little slipping was experienced with the three-cylinder 6P class (adhesive factor 4.13), whereas the four-cylinder Duchess class (adhesive factor 3.75) slipped almost to a standstill on Dainton Bank (Western region). Similarly, the two-cylinder Hall class (adhesive factor 4.64) was very free from slipping, while the three-cylinder West Country class (adhesive factor

*The King class is known in the United States; the King George V was present at the Fair of the Iron Horse at Halethorpe, Md., in 1927. The L. M. region Duchess class is generally similar in dimensions and proportions to the locomotive which accompanied the Coronation Scot train to the New York World's Fair in 1939, except that it is not streamline.

Table I — Principal Dimensions and Proportions of the Locomotives Tested

CLASS	Express Passenger					Mixed Traffic					Freight			
	West. Reg. King	East. Reg. A-4	L. M. Reg. Duchess	L. M. Reg. 6-P	Sou. Reg. Merchant Navy	West. Reg. Hall	East. Reg. B-1	L. M. Reg. 5	So. Reg. West Country	West. Reg. 2800	East Reg. 0-1	L. M. Reg. 8F	Austerity	Austerity
Type	4–6–0	4–6–2	4–6–2	4–6–0	4–6–2	4–6–0	4–6–0	4–6–0	4–6–2	2–8–0	2–8–0	2–8–0	2–8–0	2–10–0
Weight engine, lb.	199,360	230,608	235,760	185,920	211,940	169,792	159,376	161,504	192,640	170,800	164,192	161,504	157,360	175,392
Weight on drivers, lb.	151,200	147,840	149,968	136,640	141,120	126,560	117,600	121,520	126,000	150,080	147,504	141,344	137,200	150,416
Diameter drivers, in.	78	80	81	81	74	72	74	72	74	55.5	56	56.5	56.5	56.5
Cylinder, no. and diam., in.	4–16½ x 28	3–18½ x 26	4–16½ x 28	3–18 x 26	3–18 x 26	2–18½ x 30	2–20 x 26	2–18½ x 28	3–16⅜ x 24	2–18½ x 30	2–20 x 26	2–18½ x 28	2–19 x 28	2–19 x 28
Tractive force, lb.	40,300	35,455	40,000	33,150	37,500	27,275	26,878	25,455	31,000	35,380	35,518	32,438	34,215	34,215
Factor of adhesion	3.75	4.18	3.75	4.13	3.76	4.64	4.375	4.77	4.06	4.24	4.15	4.35	4.01	4.4
Boiler pressure, lb.	250	250	250	250	280	225	225	225	280	225	225	225	225	225
Tube length, ft.-in.	16–5⅜	17–11¾	19–3	13–0	17–0	15–2⅛	13–11⅞	13–2⅛	17–0	15–2⅛	13–11⅞	12–2⅞	12–0	15–8
Heating surface, sq. ft.:														
Evaporative	2,201.0	2,576.3	2,807.0	1,850.0	2,450.9	1,737.5	1,661.0	1,650.0	2,122.0	1,841.4	1,661.0	1,650.0	1,680.0	1,951.0
Superheater	289.0	748.9	830.0	420.0	822.0	295.0	344.0	376.0–348.0	545.0	262.6	344.0	230.0	310.0	423.0
Total	2,490.0	3,325.2	3,637.0	2,270.0	3,272.9	2,033.5	2,005.5	2,026.0–1,998.0	2,667.0	2,104.0	2,005.0	1,880.0	1,990.0	2,374.0
Grate area, sq. ft.	34.30	41.25*	50.0*	31.25	48.5*	27.07	27.9	28.65	38.25*	27.07	27.9	28.65	28.6	40.0*
Gas area, tubes— grate area, per cent.	15.25	15.1	13.8	14.87	12.6	16.12	15.95	15.8–16.6	13.43	15.74	15.95	15.7	16.9	11.6

*Wide fireboxes.

Table II — Overall Fuel Performance and Water Rate

Regional designation	Passenger type locomotive	Coal rate*	Water rate**	Mixed traffic type locomotive	Coal rate*	Water rate**	Freight type locomotive	Coal rate*	Water rate**
W. R.	King	3.57	28.58	Hall	3.94	29.97	2800	3.42	26.80
E. R.	A.4	3.06	24.32	B.1	3.59	27.64	0.1	3.37	25.73
L. M. R.	Duchess	3.12	27.08	5	3.54	27.99	8F	3.52	27.26
L. M. R.	6P	3.38	25.81	....	....	....	....	....	....
S. R.	Merchant Navy	3.60	30.43	West Country	4.11	32.64	....	....	....
.....	.....	....	....	....	....	....	Austerity 2-8-0	3.77	28.75
.....	.....	....	....	....	....	....	Austerity 2-10-0	3.52	28.05

$$\text{*Coal rate} = \frac{\text{All coal total weight, lb.}}{\text{All work done, hp. hrs.}}$$

$$\text{**Water rate} = \frac{\text{All water, total weight, lb.}}{\text{All work done, hp. hrs.}}$$

4.06) was prone to slipping when starting and on grades.

In several instances, with good rail conditions, partial slipping for considerable distances was recorded with the Southern region Merchant Navy class and, in one instance, with the Southern region West Country class.

Drawbar Pull Characteristics

The primary oscillations of drawbar pull recorded in the dynamometer car were found to be more pronounced with two-cylinder engines and greater with certain designs of this type than with others. Maximum amplitudes were recorded with the Western region locomotives of the 2800 and Hall classes. The primary oscillations with the London-Midland region 5 and 8F classes were negligible.

In certain cases there was a marked tendency for the primary oscillations to increase suddenly at a particular speed and pull, irrespective of whether the critical speed was approached from a higher or a lower speed. In these cases the effect of operating at a greater pull was to raise the speed at which the increased oscillations were encountered.

On the Austerity 2-8-0 and 2-10-0 types severe longitudinal oscillations between engine and tender occurred when coasting, particularly when the tender hand brake was applied.

Conclusions

Whereas individual tests of this kind have been carried out from time to time by all the former companies, this is the first occasion on which so comprehensive a series has been run. It has given the Railway Executive the opportunity of basing its locomotive design policy on known and recorded facts. The tests outlined only cover operating and performance features. These have to be supplemented for each locomotive by data on building and repair costs and on availability in daily service.

The following conclusions are set forth in the report:

"1. Except in abnormal circumstances the locomotives demonstrated their ability to work the selected trains to the overall timings and, when operating on 'foreign' routes, differing widely in geographical character from their 'home' routes, performance was not impaired.

"2. For comparable conditions and duties locomotives with wide fireboxes were confirmed in having a higher overall efficiency than those with narrow fireboxes, but the effect of differences in other design features reversed this in some cases.

"3. The importance of correct firing technique in relation to the type of coal used and the necessity for adjusting details of design, such as spacing of firebars, to suit the type of coal used were especially evident in connection with the higher power outputs.

"4. The advantages of high boiler output and large thermal capacity to give a reserve of power and margin for rapid recovery without an appreciable decrease in overall efficiency were clearly indicated.

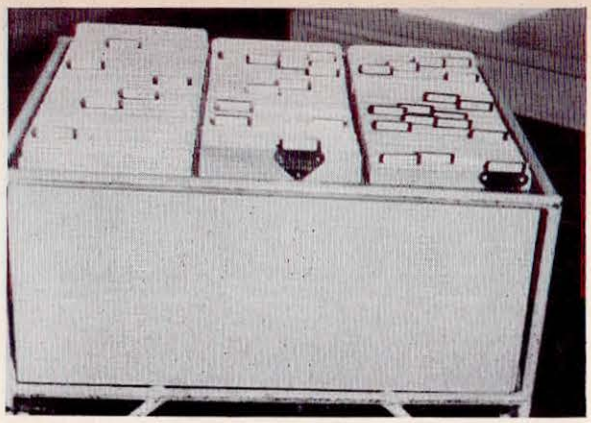
"5. Steam temperatures were not recorded, but there were indications that an increase in the degree of superheat effected an improvement in efficiency in the case of express-passenger and mixed-traffic locomotives. In the case of freight locomotives the improvement was much less marked.

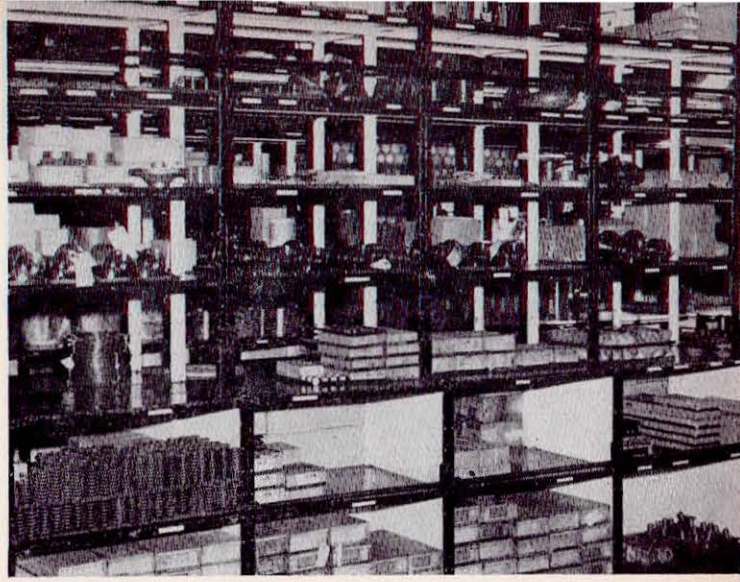
"6. With regard to slipping, the performances of the different locomotives were variable and further investigation is desirable.

"7. In view of the irregular drawbar pulls recorded in certain cases, it is considered that further investigation should be made into the effect of balancing, valve setting, and other relevant factors on the smoothness of drawbar pull.

"8. The express-passenger and mixed-traffic locomotives with the smaller diameter coupled wheels experienced no difficulty in attaining the speeds necessary to maintain the schedules.

"9. On all routes it was noted that the average power required from the locomotives was low in relation to the maximum power required."





Records are kept in a shop-made "tub" (above). Cards are filed by classes in part number order. Parts are stored in open type metal racks (right) and the unit piling method is used wherever possible. The location method of storage is used, rather than storing by part number or stock number

DIESEL PARTS RECORDS ON B. & M.

The use of a card type record—instead of the old style stock book—which contains information on application of parts to specific Diesel-electric units, has helped the Boston & Maine's stores department to conserve material, and has given the mechanical department of that railroad a record to aid it in maintenance work. This record is kept on an 8½ by 11 in. card, both sides of which are used. In effect, a running inventory, order record and application record are all maintained on the one sheet (see illustration).

At Mechanicville, N. Y., where maintenance is done on 72 Diesel units, this system has been especially useful. As parts are issued they are charged to the specific unit. This charge is recorded in the column headed "used record." Thus, if unit 4215-A, for example, has been using too many of a certain part, it is easily noticed by the clerks or the stockman and the fact is called to the attention of the mechanical department for possible correction.

A recent incident serves to illustrate another value of this application record. A batch of pistons had been repaired, inspected and returned to stock. After these parts were installed, trouble in one unit was traced to one of these pistons. From the stores department's records it was easy to tell to which units these parts had been applied. The mechanical department records showed in what cylinders these pistons had been installed. They were pulled before more damage resulted.

Another advantage of this type of record is that the stores department does not find it necessary to "tear up" the stock book to enter any new item that may appear. Also, the clerk working with the card for a particular item is not denying anyone else access to the records of all the other items. This feature is especially valuable when it comes to taking stock. The stockman merely takes a batch of cards from the "tub" and goes about his business. When he is finished cards go back in their places. In the meantime all other records are available to the office clerical force.

The B. & M. stores department comes under the general jurisdiction of A. W. Munster, vice-president, purchases and stores. At the head of the stores department is O. A. Donagan, general storekeeper, while the Diesel storekeeping branch is headed by C. R. Clements, Diesel traveling storekeeper. The storekeeper at Mechanicville is A. J. Carney.

Form M. 3004 REV. B & M R.R. STOCK RECORD MEC R

CLASS	ORDER FROM	UNIT	DESCRIPTION	PAINT PC. NO. OR SIZE
ITEM				
MAX.				LINE NO.
MIN.		STD PKG	USED FOR	NO. PER UNIT / SECT.
WEIGHT	VALUE		ON LOCOS & CARS	NO. UNITS IN SERVICE / RACK
			SUPERSEDES / SUPERSEDED BY	NO. LOCOS & CARS. / BIN

USED RECORD

DATE	AMT RECD	USED AMT	USED FOR	BAL ON HAND	ASSIGNED AMT	ASSIGNED FOR	BAL AVAIL	DISPOSAL OF OLD MAT'L

ORDER RECORD

DATE	ON HAND ACTUAL	DUE	H.O.	USED SO BY	USED AVE.	AMT ORD	ORDER NUMBER	RECD AMT.	RECD DATE

CHANGES

DATE	FROM	TO	BY

DISPOSAL OF OLD MATERIAL KEY
A - SCRAP
B - TO SHOP FOR REPAIR
C - HELD FOR FACTORY REPAIR
D - UNKNOWN
E - EXPENDABLE MATERIAL.

Stock card used as Diesel parts record by the Boston & Maine and Maine Central. Colored tabs in upper right corners are used to indicate to storekeeper that this item should be ordered

CAPTION READS COUNTERCLOCKWISE

The first railroad stamp issued by the United States—An early locomotive amid the palms of Djibouti—A railroad commemorative travels by air—Japan commemorated seventy years of railroading in 1942—A recent issue from the Belgian Congo

Railroading in Stampdom

The philatelist — in plain English, the stamp collector — who is lucky enough to have in his collection a two-cent, carmine and black stamp featuring locomotive No. 999 highballing the "Empire State Express" has one of the most intriguing stamps in any railroad enthusiast's collection. But if the train is pictured upside down, the stamp can literally be swapped for an all-expense tour around the world! There are not many of these inverted "999" stamps in circulation, but the few that do exist are members of the "Royal Family of Stampdom." One of them has been known to bring as high as $2,500 at a stamp auction.

For the philatelist who likes "to go topical," and for the millions of railroad workers and enthusiasts throughout the world, there is a tremendous fascination in collecting railroad stamps. And there are lots of them; according to one authority, 78 different countries have issued well over 800 railroad stamps to date.

These stamps portray hundreds of different railroad subjects—locomotives, trains, bridges, track workers, signal bridges, tunnels, train ferries and even the wartime bombardment of a Danish railway junction. Some of these stamps are engraved; others are printed by many different methods.

New Brunswick holds the distinction of having produce the first railroad stamp. Issued in 1860, her one-cent stamp admirably features a typical "puffer" of that period.

The second railroad stamp to appear was issued by the United States. Printed in 1869, the year the first transcontinental rail route was opened, this stamp is an ultramarine three-center. It depicts a 4-4-0 type locomotive, with "ballon stack," which was so distinctive in design that it came to be known as the "American" type. The 1869 American issue featuring the 4-4-0 locomotive was reissued in blue in 1875. The following year, a series of four stamped envelopes was printed to commemorate the centennial of American independence. While three of these envelopes are relatively easy to obtain, one of them—if it can be found—cannot be purchased for less than $1,000.

More than 800 railroad stamps have been issued by 78 different countries

Twenty-five years passed before another United States railroad stamp was to appear. In 1901, the "Empire State Express" stamp was issued to commemorate the Pan American Exposition being held in Buffalo, N. Y. The inverted train, already referred to, was produced as the result of the center plate's being inserted upside down during the printing. Another curious feature of this stamp is that when the center plate was reassembled, it was locked so loosely during printing that the train then appeared in a great number of varying positions. Collectors immediately spotted this oddity, and a few now take particular delight in arranging these stamps on pages so that the express train is shown in progressive stages of its run—first emerging in the right-hand corner of the stamp and finally disappearing at the left. These "progressive stamps" are not found very frequently, and even then they are obtainable only in blocks of four with plate numbers

still attached in order to guarantee their authenticity. Needless to say, collecting these stamps oddities can be undertaken only by the well-to-do philatelist.

During 1912 and 1913, three parcel post stamps were put out by the United States depicting a railway postal clerk operating a catcher arm picking up a mailbag, a mail train, and a manufacturing plant showing freight cars on the siding. More recent issues include the 1944 commemorative featuring a painting of the golden spike ceremony, two composites in 1947 of early and modern mailcarrying vehicles, and the 1948 stamp picturing a train passing over the railroad bridge at Niagara.

Fourteen stamps in which railroad motive power and other equipment are featured or shown incidentally have been printed by the United States to date, although only one of these was issued to commemorate the important role which railroad transportation plays in our daily lives.

Belgium Leads in Number

Belgium, with only 3,209 mi. of railroad, has printed more railroad stamps than any other country in the world. The first of Belgium's 244 stamps honoring her railroads appeared in 1879, and more than 20 different railway subjects have been featured, including winged wheels on rails, a track worker adjusting tie plates, an engineman in a locomotive cab, and a railroad crossing.

Since railroading in numerous countries is about 100 years old, many special issues commemorating centennials and other anniversaries have appeared in recent years. For example, Bulgaria issued four colorful stamps in 1939 to mark the fiftieth anniversary of her state railways. One of the better known stamps in this series is a dark blue one showing Tsar Boris III, in military uniform, peering out of the cab window of a steam locomotive.

The development of the steam locomotive was first shown on a series of stamps in 1933 when the Egyptian government authorized the issuance of four stamps to honor the delegates to the International Railway Congress then meeting in Cairo. Although lithographed in rather somber colors, the contrast between the "teakettle" of 1852 and the big "jack" of 1932 is striking.

Many South American Railroad Issues

Our Pan American neighbors have not failed to recognize the important role of rail transportation in their national economies, and their contribution to railroad philately is considerable. The first railroad stamp to be issued in South America was produced by Peru in 1871. Artistically designed, this stamp is brilliant scarlet and features an early "puffer" atop the heraldic shield of Peru. In 1936 Peru gave honor to the first locomotive to be used on the South American continent. Pictured on a gray and black postage stamp, the locomotive "La Callao" was placed in service in 1851, and it bears close resemblance to early American locomotive designs. Ecuador has issued many fine railroad stamps. In fact, she depicted a 4-6-0 locomotive on the reddish brown stamp of 1908 which is generally considered as one of the finest stampic reproductions of railroad motive power ever made.

Left—One of Turkey's streamliners. Right—A Belgian locomotive engineer at the throttle

Strange as it may seem to many railroaders, the "iron horse" has been given recognition in a number of air mail issues. Approximately 33 railroad stamps fall within this category, and, with the exception of five Manchukuoan, Iraqian and Romanian issues, all of them were produced by Latin American countries.

Without doubt, the most delightfully humorous stamp in the railroad group is the Costa Rican air mail issue of 1947. This blue-green and black engraving was issued to commemorate the fiftieth anniversary of the Ferrocarril del Pacifico—an electric railroad—and it features a steam locomotive!

It is possible for railroad workers and enthusiasts to take a fascinating trip around the world via railroad postage stamps. Here is a list of countries which are "musts" on a rail stamp itinerary:

Abyssinia
Albania
Algeria
Argentina
Austria
Australia
Belgium
Bolivia
Brazil
Bulgaria
Canada
Canal Zone
China
Chile
Congo
Costa Rica
Croatia
Cuba
Czechoslovakia
Denmark
Dominican Republic
Ecuador
Egypt
Eritrea
Finland
France
Germany
Gold Coast
Greece
Guatemala
Honduras
Hungary
India
Indo-China
Iraq
Italy
Jamaica
Japan
Jugoslavia
Labuan
Latvia
Liechtenstein
Manchukuo
Mexico
Mid-Congo
Monaco
Mozambique Company
Nejd
Netherlands
New Brunswick
Newfoundland
New Zealand
Nicaragua
North Borneo
Norway
Panama
Paraguay
Persia
Peru
Transvaal
Turkey
United States
Romania
Russia
Saar
Salvador
San Marino
Serbia
Siberia
Somali Coast
Southern Rhodesia
Southwest Africa
Spain
Spanish Morocco
Surinam
Sweden
Switzerland
Uruguay

Most railroad issues can be obtained at reasonable cost. The value of a stamp, however, will depend upon such factors as its state of preservation, the number in circulation, and the demand, which is often controlled by collectors themselves. Stamps without perforations are more valuable than perforated one, for only a few sheets ever slip through the perforating machines without having these holes punched. But any error or oddity makes a stamp exceedingly valuable.

Coach passengers enjoy the buffet car

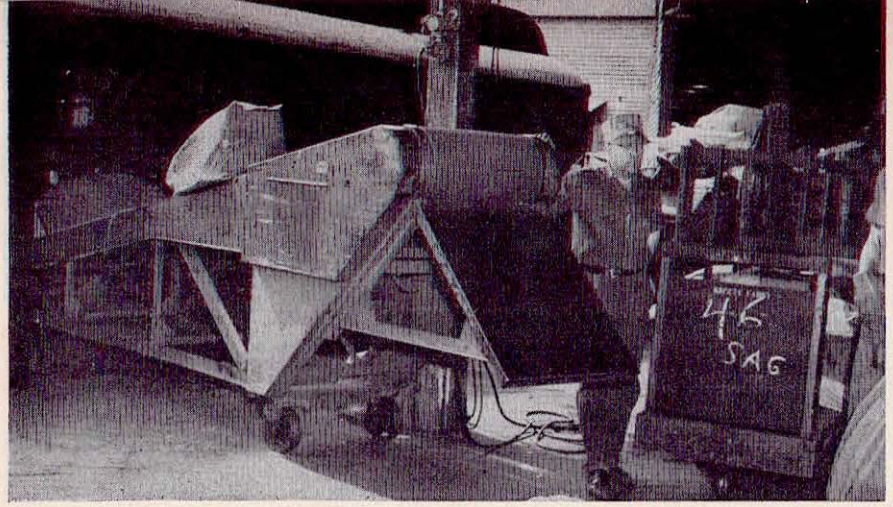
DINING CAR STRATEGY

By the simple expedient of rearranging the consist of the "California Zephyrs," it has been possible not only to achieve desired relief for the dining cars, but also to increase the availability of the buffet service to coach passengers.

When the Chicago, Burlington & Quincy, the Denver & Rio Grande Western and the Western Pacific inaugurated the Budd-built "California Zephyrs" on March 20, a dormitory-buffet car, intended primarily for the use of coach passengers, was placed behind the three coaches and ahead of two bedroom-and-roomette cars. The full dining car, two sleepers and the observation-lounge car followed. In actual service, this positioning tended to draw passengers from the two sleeping cars forward into the mid-train buffet car for liquor service. The presence of passengers enjoying refreshments changed the atmosphere of the car to that of a club-lounge and dissuaded coach passengers from partaking of the a la carte buffet snack service available there. This thrust an additional burden on the dining car which — although it seats 48 and can comfortably handle three sittings each meal— was being considerably taxed by heavier-than-anticipated patronage. The consist of the train was rearranged so that the full dining car is between the buffet and the first two sleeping cars. This immediately influenced the Pullman passengers to move to the buffet-lounge car at the rear of the train for beverage service. Coach patronage of the buffet-snack service increased as the refreshment trade shifted.

Effective June 1, as the summer tourist season entered its three-month "stand," cold plate meals were added to the a la carte coach-buffet menu, with the idea of making available to vacationists an inexpensive meal service, and, at the same time, to further relieve the dining car.

The service of cold plate meals from the small, one-man buffet kitchen is handled by the substitution of complete paper service—except for coffee, cereals and liquor—relieving the cook of most of his dishwashing chores.



Left—One of the conveyors being used to unload a car of mail. Note plug on post (in upper center) for source of electric power. Right—The lower end of the conveyor is in the car to receive sacks of mail. The end of the conveyor is angled more to the end of the car if work is being done only at one end

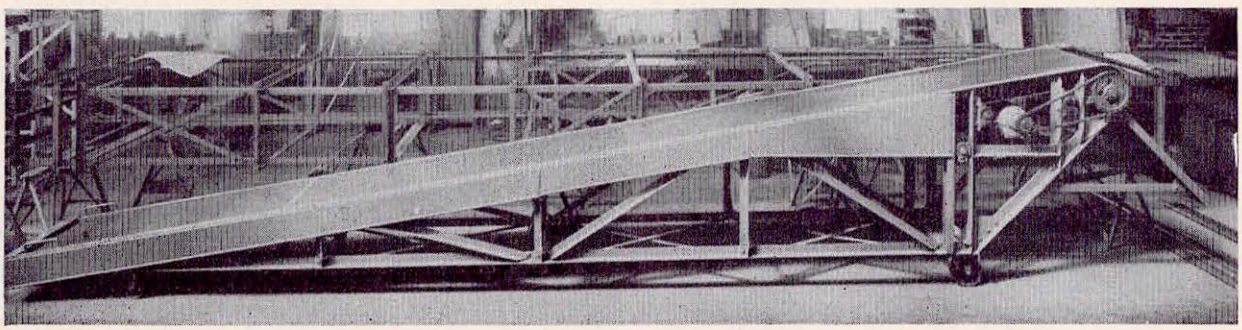
Portable Conveyors Help Handle Mail

The three portable, electric-powered belt conveyors which the Illinois Central has installed at its Central Station in Chicago for the handling of parcel post mail have reduced by 20 per cent the time required to unload each car of such mail. Illinois Central officers report that these conveyors, which are used almost exclusively in the unloading process, have made unnecessary the hiring of an additional five or six men to handle the volume of mail now going through the station. Also, there has been a sizable reduction in the direct labor cost of handling storage mail, part of which is ascribed to the use of the conveyors. In addition, this faster unloading frequently has meant that the I.C. has been able to avoid delays and increase the car capacity of the unloading platforms. Since about 30 cars per day are unloaded, including those from the Michigan Central and the Big Four, the importance of these savings is obvious.

Once a car of mail has been spotted for unloading and the first few sacks in the doorway have been removed, the low end of the conveyor is pushed into the car and unloading begins in earnest. As a sack comes out of the car and reaches the end of the belt it rolls down over an apron, which tends to break the force of the fall to the platform and also to keep the sacks from rolling back under the body of the conveyor. Then the required separations are made, with the men pulling the sacks farther across the platform (generally) or putting them on live skids for movement if the distance is great. Sometimes, if the bulk of the mail from a car is to be moved a distance of 50-75 ft., the three conveyors are placed end-to-end with a man stationed at the low end of the second and third units to load sacks onto them as they come off the preceding belt. Thus this medium distance handling is facilitated. This method is used especially when heavy sacks, such as those filled with magazines, come through. Fatigue is reduced and more efficient handling is the result.

The platform at Central Station, being about 350 ft. long and 45 ft. wide, is almost ideal for the use of portable conveyors. Since these conveyors are electrically powered frequent power sources are necessary, and they have been provided at intervals of 50 ft. along the platform. These conveyors, two of which are 20 ft. long while the other is 24 ft. long, were installed about a year ago. They were built by the Samuel F. Olson Manufacturing Company of Chicago. Powered by a 2-hp. gear motor, with roller chain connection direct to the headshaft, the units develop a belt speed of 180 ft. per min. Belting is of friction surface rubber, 24 in. wide. Belts are not reversible.

Work at Central Station is under direct supervision of F. G. Newman, mail and baggage agent, while overall supervision of the I.C. station forces is by W. M. Hale, superintendent of stations.



Non-operative view of conveyor showing motor and chain drive

New and Improved Products of the Manufacturers

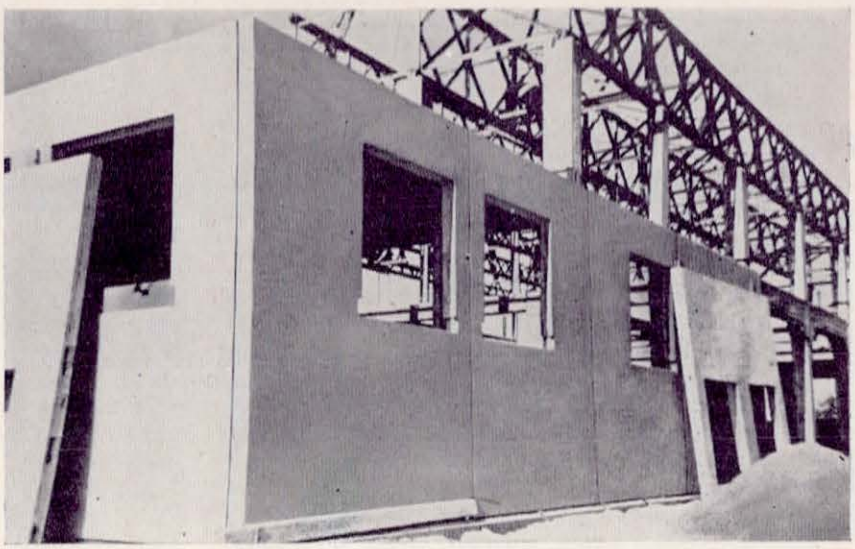
BRAKE BEAM WITH KEW-LOCKED HEADS

The Buffalo Brake Beam Company 140 Cedar street, New York 6, has announced a new brake beam to be known as the Truslock. It has been under development and in service tests for three years, and is Buffalo's answer to the need for replacing the present No. 3 and No. 15 brake beams with a more efficient brake beam better suited to present-day operating and maintenance requirements.

It has been ascertained from statistics obtained in a recent survey that approximately 50 per cent of all freight car brake beam failures were caused by worn brake heads. The outstanding feature of the Truslock brake beam is a removable brake head which is not a fixed part of the permanent brake beam truss proper but which may be slipped on and off as easily and as quickly as a brake shoe, so that a car need no longer be cut out for replacement of the entire brake beam. With the Truslock system, the car inspector merely drops one side of the brake beam, pulls one simple string key, and the defective brake head is slipped off the beam and a new head slipped in its place.

This procedure not only achieves a tremendous saving in time and effort from an operating standpoint, but it should also cut brake beam reclamation costs in half by completely eliminating the necessity for rebuilding all brake beams pulled out of service by reason of excessive head wear. Under existing Association of American Railroads rules all No. 3 or No. 15 beams now submitted to reclamation for excessive head wear must be rebuilt with a new tension rod and new nuts, and subjected to test before being returned to service. On some railroads this procedure now costs in excess of $6 per beam, exclusive of the labor cost of removing and replacing the defective beam, and transportation costs to and from the reclamation plant.

As an added economy, the Truslock beam is expected to effect a marked reduction in brake beam inventory, by reducing the number of beams required for stand-by service, as well as the number of beams in transit to and from reclamation plants, or actually in the process of reclamation.



Construction view, showing bay-filling cellular-glass-insulated wall panels in place. The window openings were cast in the walls

WALLS INSULATED WITH FOAMGLAS

The Pittsburgh Corning Corporation, Pittsburgh, Pa., has announced that its cellular-glass insulating material, Foamglas, is now being used effectively as the core of a new "sandwich" type wall panel which has recently been perfected after a number of years of development work, and which is currently being used on a number of building construction projects. This wall panel consists essentially of an insulating layer of cellular glass sandwiched between concrete veneers. It can be made (either on the job or prefabricated and shipped to the point of erection) for use in all three basic curtain wall systems, namely, spandrel (horizontal), vertical and bay-filling. It may be hung on the frame, or, in some designs, installed to carry its own weight.

The wall panel can be made in any practical size, and in any thickness consistent with sound practice. The largest panel made to date has an area of 256 sq. ft. The most popular thickness is 6 in., made up of 2 in. of cellular glass between 2-in. interior and 2-in. exterior veneers. The concrete veneers are processed by heavy mechanical troweling, steam curing and/or vacuum processing to improve weathering characteristics. The exterior and interior faces of the wall require no additional finishing; attractive and serviceable finishes are achieved in the casting procedure.

The outstanding features of the new panel wall include adaptability to any building design regardless of floor plan, window arrangement or structural skeleton; sufficient strength without massive weight to resist forces three to four times the wind-load limit, a feature said to yield important economies in frame design and in foundation, erection and handling costs; and high resistance to fire due to the incombustibility of the wall materials.

In addition, it is said that, although the walls are only half as thick as conventional walls, they have over twice the insulating value due to the high insulating properties of the cellular glass. Furthermore, the Foamglas stops moisture vapor migration from one side of the panel wall to the other, thus preventing destructive condensation. Moisture migration at the joints in controlled by the use of a new permanent mastic joint sealing material.

Designed for increased maneuverability are new models of Clark Equipment Company's (Battle Creek, Mich.) electric-powered Clipper (2,000 lb. capacity), Carloader (4,000 lb. capacity) and Utilitruc (7,000 lb. capacity). Turning radii for all three models have been reduced. For the Clipper this reduction in turning radius is 6½ in., for the Carloader 6¼ in. and on the Utilitruc 6 in. Standard models remain unchanged.

CAR SHAKER FOR BULK LADING

To augment its present line of car unloaders, the Link-Belt Company, 307 N. Michigan avenue, Chicago 1, developed a self-contained vibrator unit, for unloading bulk granular materials from open-top, hopper-bottom gondola cars to conventional track hoppers serving bulk-materials conveying equipment. The shaker is adaptable to unloading coal, sand, coke, ore, gravel, cinders, etc., and for accelerating the removal of damp materials frozen in cold weather.

Cars need not be uncoupled while the shaker is in operation, and may move through the unloading zone as a complete train. The car shaker, which is normally suspended from a hoist, is lowered to the top of the car to begin its operation. Rotation of the vibrator shaft at normal speed causes the vibrator end to rise and fall, and impart heavy hammer-like blows to the car, proportional in frequency to the speed of the vibrator shaft. The energy of these impacts on the vertical car sides is transmitted directly to the sloping portions of the hopper-car bottom for loosening and unloading material.

The shaker pivots on the car top on shoes which act as guides to maintain the position of the unit on the car. It is usually located at the center to impart equal vibration to both ends. Its frequency of vibration is reported to be low enough to permit average conversation at a distance of 100 ft. from the machine.

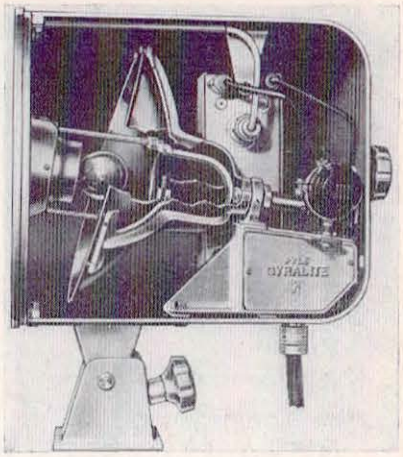
The Link-Belt Car Shaker weighs 9,500 lb., complete with a 20-hp. motor wound for 3-phase, 60-cycle, 220- or 440-volt alternating current.

TRAIN WARNING PROJECTORS

Train warning lights made by the Pyle-National Company, 1334 North Kostner avenue, Chicago 51, feature simplicity, having only one lamp, one reflector, and one motor to move the beam through the established pattern and to change the beam color, when desired, from white to red. Known as the Gyralite, this product is made in either single-purpose of multipurpose types, the difference between the two being that the multipurpose has an automatic color-changing device that the single-purpose Gyralite does not have. The warning light is also made in several designs and for either head-end or rear-end mounting.

The automatic air-pressure type functions with an air-brake application, and has automatic trip and manual reset for both single-purpose and multi purpose Gyralites. The automatic generator-voltage type is controlled by train speed with automatic transfer from axle generator to battery and vice versa. It is used only for single-purpose Gyralites at the rear of trains. The manual headlight-interconnected type automatically extinguishes the locomotive headlight for maximum visibility of the red warning signal and automatically restores the locomotive headlight in the event of a lamp failure in the Gyralite. This is used for both single-purpose and multi purpose Gyralites. The manual selective type simultaneously controls the locomotive headlight by opening and closing the headlight circuit when the Gyralite is turned on and off. It is for single-purpose Gyralites at the front of trains.

The gyrating beam from the Gyralite forms a conical pattern with the vertex in the projector. The center line of the beam is alined parallel with the track when at the lowest point in its gyrating path. Thus approaching trains intercept the full intensity of the light at the bottom of each sweep, and in all other positions the beam is projected above the horizon. The beam is never projected toward the ground where the light is wasted and disturbing to the vision of the locomotive crew. The rotative speed is slow enough to permit continuous observation of the projected beam throughout its circular path.



Automatic train warning projectors

The motor has grease-sealed bearings and brushes with flexible pig-tail leads to insure a solid current path. The gear housing has bronze bearings and is totally enclosed and grease packed. Since both the motor and the lamp holder are stationary, there are no moving lead wires to the lamp holders or motor to wear out or cause failure as a result of constant flexing.

An automatic ticket vending machine, manufactured by the General Register Corporation, Long Island City, N. Y., was placed in service this week at Pennsylvania Station, New York, by the Long Island. This machine prints and sells one way tickets at charges up to $1.82, for use between Pennsylvania Station and the 50 most frequently requested destinations on the Long Island. To operate the machine, a patron merely sets the selector knob for the desired destination, deposits coins, and presses the operating bar at the right of the dial. Ticket and change, if any is due, are received from different slots

How Do Diesels Affect Jobs?

"A Plain Statement of Facts" distributed to all Southern Pacific employees and to shippers, by A. T. Mercier, president

Because they are far more economical and efficient, Diesel locomotives are replacing steam power on American railroads. Many of us may be concerned with how the Dieselization of our lines will affect our jobs, and I shall therefore discuss the subject frankly here.

Why are we changing to Diesels?

The Diesels provide a means of meeting competition and helping keep costs down and therefore rates down. Only by doing this can we continue to attract enough traffic to provide steady jobs for the majority of our people. Already the trucks are taking away the jobs of thousands of railroad men. We must cut our costs to the point where we can compete with the trucks to get that traffic back and keep more people on the job.

What savings do the Diesels provide?

Diesels can pull heavier loads than steam engines. They require less helper service. They can make long runs without taking water and fuel or being serviced. They make better time over the road. They spend less time out of service for repairs. A freight road Diesel, for instance, will do as much work on one dollar's worth of fuel as will a comparable steam engine using $2.32 worth of fuel. They are easier on the track because they apply constant, smooth power to their driving wheels.

How fast are we Dieselizing?

To date on our transportation system we have 313 Diesels of all types in service and 89 more on order. Fourteen of these now in service are pasenger Diesels, with four to come. Fifty-six are road freight Diesels, with 42 more now on order. The balance are road switchers and yard switchers. Our long-range plan is that over the next 10 years more and more of these Diesels will be purchased, so that Diesels will replace all but the newest units of our present steam power by 1960. The change will be gradual and general over the railroad, with possibly no one district or division completely converted far in advance of another, except that branch line operation will be Dieselized fairly early in the program.

How will Diesels affect employment?

Certainly the Diesel is a labor-saving device. At the same time it will be the greatest possible safeguard to steady employment at good wages, by permitting us to hold down our rates, improve our schedules and get more business. It is true that with our railroad eventually Dieselized, fewer men will be required to move a given amount of traffic. The important thing is that we expect to be able to get more traffic with the Diesels and put more men to work.

Will some types of jobs be affected?

Yes, but gradually, over a long period. As more and more steam locomotives are replaced by Diesels, there will be less and less need for water and repair facilities at some intermediate points and on our branch lines.. At some of our shops, probably no less total men will be required than at present, but there will be a gradual shift to the kinds of jobs directly related to diesel maintenance and repair. Less track maintenance work may eventually be required with the smoother rolling Diesels. Some helper engine crews will no longer be required, and the Diesel's ability to handle heavier trains will call for somewhat fewer engine and train crews to move the same amount of traffic. Because the change will be over a long period, normal retirements and turnover will take care of most situations where the kind of job is changed. In other cases where the manpower required becomes less for a given amount of traffic, we expect that the additional business attracted will have the effect of stabilizing employment.

Why must jobs be affected at all?

There are some who hold that if three men were formerly needed to do a certain piece of work or move a certain amount of tonnage, whereas the same job can be better done by two men with better machinery, the three men should nevertheless continue to be employed on that specific operation, even though one must spend his time in idleness. And they believe further that "management" should be required to pay the bill. Against this view there are these facts. First, it is contrary to the plain, honest American precept of a fair day's work for a fair day's pay. Second, railroads are required under the Federal Transportation Act to provide economical and efficient service. And third, there just aren't enough dollars coming in to continue to pay unearned wages in addition to all our other increased costs. The only way to get more badly needed revenue is to cut our costs, so that we can pass this saving along to the customer. That is the surest way of getting more business and putting more men to work.

How big is our margin of profit?

Last year, out of every dollar we took in, there was left six and a half cents after paying wages, other expenses, taxes and interest. But of this six and a half cents, nearly four cents (3.7 cents) was spent for needed improvements. This left only a slim margin of less than three cents (2.8 cents) to be distributed to the owners of the property. This year business is down, but costs are continuing to be very high. The 40-hour week, effective September 1st, will increase our costs by seventeen million to twenty-four million dollars per year. This makes it necessary for us to seek every means of reducing expenses.

Are labor-saving devices a threat?

Americans are the most progressive and prosperous people in the world because we have continued to find better ways to produce better things at lower costs. Every labor-saving device has actually proved itself ultimately to be a job-creating device, by bringing prices down to a level where increased demand calls for increased production, putting more men to work. As a result, we in the United States have a standard of living far higher than that of any other people. We work less minutes or hours for everything we buy than do workers under any other political system. And we have free choice of what we buy, think as we choose to think, work where we want to work. We are truly a free and prosperous people *because we have put machinery to work for us.* At the same time, we can maintain our freedom and our prosperity only so long as we hold to the proved American principle that a fair day's work must go along with the higher day's pay that labor-saving machinery has made possible. Only on that basis can our Southern Pacific people and the people of the nation look forward to a secure future.

GENERAL NEWS

Sees Railroad Rates Still Relatively Low

Lesser factor in business costs than in prewar years—Faricy

Railroad transportation charges are now "relatively a lesser factor in overall production and distribution costs than in any prewar year," William T. Faricy, president of the Association of American Railroads said in an August 22 statement answering "a number of questions" he had been asked concerning "recent developments in the railroad industry." The statement came after the Interstate Commerce Commission had issued its Ex Parte 168 decision authorizing an additional freight-rate increase of 3.7 per cent which will become effective September 1.

Mr. Faricy pointed out that the prospective yield from this new increase ($293 million in additional annual revenues) will be equivalent to only about 65 per cent of the $450 million a year by which operating expenses will be increased as a result of the 40-hour week for non-operating employees, also effective September 1. Answering a question as to whether further rate increases will be necessary, the A.A.R. president recalled how railroad counsel in the Ex Parte 168 case had said that the railroads would "try to get along" without seeking further advances. "Developments after the 40-hour week goes into effect will determine whether or not this is feasible," Mr. Faricy added.

No Doubt About Need

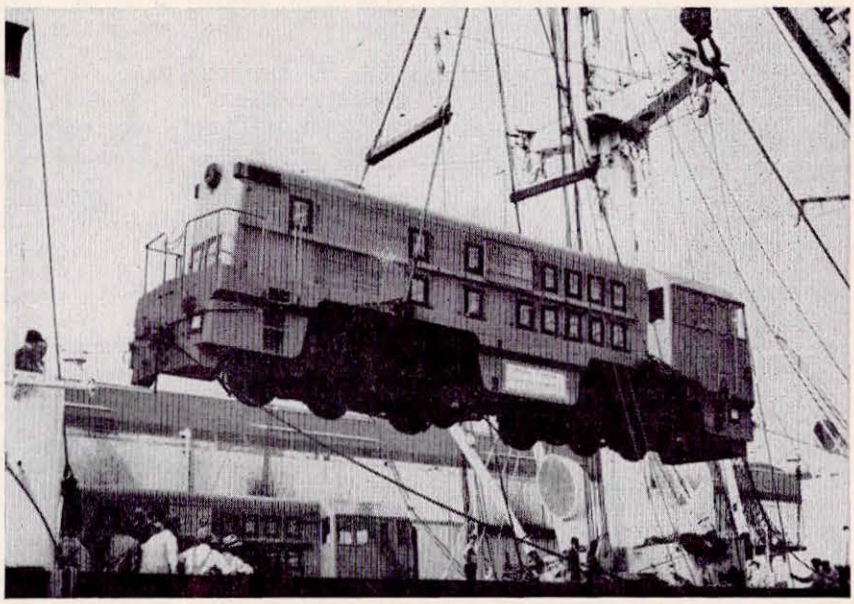
Previously, he had answered at some length a question asking whether the postwar freight rate increases have helped the railroads. Such increases "have not only been helpful," but they have been "absolutely essential," Mr. Faricy asserted. He calculated that if the traffic handled in this year's first six months had yielded only the 1946 average revenues per ton-mile and passenger-mile, the deficits in net railway operating income and net income would have been $777 million and $925 million, respectively. Actually, the net railway operating income for this year's first six months was $312.7 million, while the estimated net income was $173 million.

Calling these earnings "inadequate" as measured by "any fair standard," Mr. Faricy pointed out that they represented a return of only 2.65 per cent on the carriers' depreciated property investment. He also said that railroad earnings during the postwar period "have been extremely moderate, reaching a peak of 4¼ per cent in 1948, a year in which most other industries were recording new all-time highs in earnings."

Conceding that rate increases have caused diversions of traffic to other agencies of transport, Mr. Faricy considered how the railroads would have come out if there had been no such diversion. He said: "If the railroads had handled in the first six months of 1949 *all* the traffic that moved over the Great Lakes, over inland rivers and canals, over highways, by pipe lines, by air, and by other modes of commercial intercity transport, and had no rate and fare increases in the postwar period, they would have been no better off than they actually were from an earnings standpoint, and probably not as well off. Clearly, a considerable part of the traffic moving by competing modes of transport is non-competitive insofar as the railroads are concerned, and this applies particularly to traffic over the Great Lakes and by pipe line."

Answering a question which cited the "I.C.C.'s warning. . .that the cumulative effect of the various increases authorized may tend to divert traffic from the railroads," the A.A.R. president had this to say: "The railroads have constantly had this matter in mind in all rate and fare applications and have given it full consideration. There is no question but that there has been diversion to other modes of transport in the postwar period to date. But, and this is important, the railroads today are handling the same percentage of intercity freight ton-miles that they did in 1940, although, of course, a somewhat lesser percentage than during the war or immediately thereafter. Under prevailing governmental policies of subsidizing highway, inland waterway, and air carriers, it was inevitable that those modes of transport would return to their prewar strength as soon as war influences were removed. Thus necessary railroad rate and fare increases have been only one factor in the picture."

Meanwhile, Mr. Faricy had presented figures showing how increases since 1939 in railroad wages and other costs have amounted to more than 100 per cent while freight rates will have risen only 57.3 per cent when the new advance becomes effective September 1. He put the increases in passenger fares and mail pay at "about 25 per cent," and the in-



The Whitcomb Locomotive Company, subsidiary of the Baldwin Locomotive Works, is making delivery at the rate of nine units a month on an order for 75 75-ton Diesel-electric locomotives for the Argentine State Railways. The locomotives, for meter-gage track, will be used in mainline passenger and freight service; one is shown being loaded aboard the S.S. Rio Aguapey at New York for shipment to Buenos Aires. Each locomotive is equipped with a 900-hp. Diesel engine, Westinghouse electrical equipment and Westinghouse straight and automatic air brakes. Their maximum permissible speed is 57 m.p.h.

crease in rates charged by the Railway Express Agency at 60 per cent. "The disparity between increased unit costs and increased rates and fares," he continued, "is clearly demonstrated by the fact that on the basis of current estimates the railroads will handle in 1949 about 20 per cent more ton-miles and nearly 50 per cent more passenger-miles than in 1940, yet will undoubtedly earn a lesser net railway operating income."

In leading up to his assertion that railroad transportation charges are now relatively a lesser factor in business costs than they were in the prewar period, Mr. Faricy expressed his view that this situation has contributed to the national welfare. "No other industry of the size and importance of the railroad industry can show a better record in that regard," he added.

Car Supply "Generally Satisfactory," Gass Reports

With the annual peak loading period not far off, the box car supply continues to be generally satisfactory, Chairman Arthur H. Gass of the Car Service Division, Association of American Railroads, said in his latest monthly review of the "National Transportation Situation." Shortages for the week ended August 6 averaged only 2,578 cars per day, compare with an average daily shortage of 6,121 cars for the same period last year, Mr. Gass noted. Surpluses, as he put it, "are still running high" with an 11,899 daily average reported for the week ended August 6 compared with only 421 cars for the same period in 1948.

Because of the prolonged hot weather, the spring wheat crop matured earlier than usual and this has increased the demand for box cars on the northwestern grain roads, Mr. Gass said. To meet these increased requirements, the Car Service Division amended Special Car Order 51 on August 5 requiring the principal western roads to exempt from all distribution Great Northern, Northern Pacific and the Minneapolis St. Paul & Sault Ste. Marie ownerships and send them to the owners empty during August 8 to 20, inclusive, he continued. Mr. Gass said every effort will be made to furnish the northwestern grain roads sufficient cars to meet the impact of the harvest period. In this connection, he reported, these roads received 20,370 empty box cars during the 4-week period ended August 14.

Fewer Blocked Elevators

As to blocked elevators and grain on the ground alongside railroad rights of way, Mr. Gass said that they have been held to a minimum this season. As of August 1 only 170 elevators were blocked compared with 286 last year, and only 150,000 bushels were on the ground compared with 3,178,000 bushels last year.

Of the stock car supply, Mr. Gass reported the demand for single deck cars is increasing, due to the yearly movement of cattle off the ranges in the northwest. Hot weather and lack of moisture has damaged pastures with the result that it is anticipated loadings will be in very heavy volume in a short time, Mr. Gass said. However, he said that roads are building up their supply by speeding up repairs to stock cars and taking on miscellaneous foreign ownership stock cars from connections.

The C.S.D. chairman noted that the loadings of revenue coal in the first 5 weeks of the 3-day mining week operation were only 56 per cent of last year's corresponding period. While this production loss results primarily from reduced operations, he said, "it is apparent that market conditions have curtailed demands to a considerable extent." He noted that bituminous coal stocks on July 1 (74 million tons) represented 66 days' supply compared with 45 days' supply at the same time last year. August 1 stocks, he said, would probably be near 65 million tons. Bituminous coal production for 31 weeks to August 6 was 16.6 per cent below the corresponding period of 1948, while anthracite production was down 26 per cent, he reported.

As to the Lake coal program, Mr. Gass said that unless mining operations are increased, it is doubtful whether the season's quota of about 45 million tons will clear Lake Erie ports before navigation closes. The iron ore program, he said, has benefited by "close to record" tonnage moved down the lakes recently, with good prospects for meeting the 85 million ton objective.

Plenty of Hoppers

Of the export coal movements, Mr. Gass added that due to the restricted production and the reduction in foreign demands, overseas movements during July were considerably reduced from that of the preceding months. August tonnage is not likely to exceed 700,000 tons but "with the solution of some credit difficulties," there should be heavier export movements starting with September, he said.

As to hoppers, Mr. Gass said the supply continues "easy" with no shortages reported in the past month and Class I roads showed a gain of nearly 27,000 hoppers owned July 15 as compared with the same date last year. Of the gondola supply, Mr. Gass reported a "tightening up" of supply in steel loading districts about the middle of this month. Long gondolas are in active demand in the Youngstown-Lorain area for heavy movements of pipe destined to western and southwestern points, he added.

The demand for plain flats has changed very little since his last report, Mr. Gass said. Demands are moderately heavy in the Midwest for the loading of agricultural implements and machinery, and also in the Pacific Northwest for increased lumber loading, he noted. Because of the "vigorous" demand for well and depressed center type flat cars, Mr. Gass again urged that these cars be handled expeditiously so that the limited ownership may be spread to meet all requirements. Loadings of covered hoppers are running ahead of last year, he said, and demands recently have been heavy for cement loadings and increased movements of chemicals and phosphate rock. As to refrigerator car loadings, Mr. Gass noted that they usually drop to the lowest level during August, and this year was no exception.

Equipment-production data included in the report showed that installations of 5,328 freight cars by Class I roads and their affiliated refrigerator car lines in July were offset by retirements of 6,721. There were net losses in box, gondola and covered hopper cars, and net gains of 354 refrigerators and 351 hoppers.

Average turn-around time for freight cars was 16.84 days in July, compared with 13.88 days in July, 1948. Mr. Gass said that it should be "emphasized that the increase in turn-around time comparing July, 1949, with the corresponding month of the three preceding years does not indicate any slowing up of railroad operations." He pointed out that carloadings in 1949 have been "considerably"

"Overloaded Truck Can Net $12,500 Extra in a Year"

"If we are to save our once magnificent highways from utter destruction we must take the profit out of overloads. A little investigation discloses the fact that 50 cents per hundredweight is a fair average of the rate received by motor carriers for the movement of general freight between Chicago and Indianapolis, for example. That is $10 per ton and an overload of only 10,000 lb. will pay the operator about $50 per trip. Five trips a week and 50 weeks a year add up to $12,500 extra annual revenue per truck unit. No wonder some fleet operators will take chances and send out units with substantial overloads, knowing that some will get through undetected and pile up a profit that will dwarf any purely nominal fine for those who get caught . . . .

"A greatly augmented and still increasing number of heavy trucks and trailers, operating for long distances at high speeds, is destroying our roads faster than we can find the money with which to replace them . . . .By . . . overloading they [truckers] hasten the destruction of the very highways provided for them by a generous public, and from which they derive their living; highways which would otherwise serve the needs of the overwhelming majority of highway users for many years to come. This selfish, shameful, shocking disregard of the public interest is comparable only to the ruinous and wanton exploitation of the gifts of nature."

From a paper read by Samuel C. Hadden, chairman, State Highway Commission of Indiana, before the Midwestern Regional Conference of the Council of State Governments, at Davenport, Iowa, on July 26.

under the three preceding years with the result that freight cars were surplus in greater quantity. "Surplus cars are included in the calculation of turn-around time and when the divisor, which is the carloadings, is lower, the natural result is to show an increase in turn-around time," Mr. Gass added.

The number of cars detained beyond free time averaged 20.26 per cent of the total placed in July, compared with 16.93 in July, 1948, and 19.45 in June, 1949.

L. M. Betts Retires from A.A.R.; Succeeded by E. W. Coughlin

Leon M. Betts will retire on August 31 as manager of the Railroad Relations Section of the Car Service Division of the Association of American Railroads. Eugene W. Coughlin, at present assistant to chairman of the Car Service Division, has been appointed to succeed Mr. Betts. The position now held by Mr. Coughlin will be abolished.

Mr. Betts, who was born in Burr Oak, Mich., in 1879, began his railroad career on the Chicago & Western Indiana and the Belt of Chicago in 1900, after five years of service in other industries. With the exception of one year, he was affiliated with these railroads until 1918 in such capacities as stenographer, chief

Leon M. Betts

clerk to superintendent, general superintendent and general manager and car accountant. From 1918 to 1919 Mr. Betts was supervisor of car service under the regional director of the Northwestern Region of the United States Railroad Administration. In 1920 he served as supervisor of transportation under the U.S.R.R.A. and assistant director of the transportation division of the American Petroleum Institute. Mr. Betts was named manager of the Closed Car Section of the A.A.R. in 1920 and served in that capacity until 1942, when he was promoted to his present position.

Mr. Coughlin was born in Richmond, Mo., in 1892 and received his education at St. Mary's College in Kansas City. He joined the Chicago, Rock Island & Pacific in 1910 and for the next eight years held various positions in the bridge and building department, the freight claim department, the division superintendent's office, and as car distributor. From 1918 to 1919 Mr. Coughlin served in the department of the adjutant general of the U. S. Army and during the next year he was an inspector in the Car Service Section of the U.S.R.R.A., which later became the Commission on Car Service of the American Railway Association. After being employed as car inspector of the Missouri-Kansas-Texas from 1921 to 1923, Mr. Coughlin joined the Car Service Division of the A.A.R., and since that time has served in such capacities as car service agent, district manager, secretary of the division and assistant to chairman.

Eugene W. Coughlin

Chicago Traffic Club Honors Ralph Budd

William T. Faricy, president of the Association of American Railroads, dubbed Ralph Budd, retiring chief executive of the Chicago, Burlington & Quincy, "dean of railroad presidents" and "the industry's elder statesman" at a testimonial dinner on the eve of Mr. Budd's seventieth birthday. The dinner, on August 19 at the Palmer House in Chicago, was sponsored by the Traffic Club of Chicago.

Mr. Faricy paid special tribute to Mr. Budd for the great services he rendered to the carriers and to the national welfare as transportation commissioner on the advisory commission to the Council of National Defense in 1940 and 1941, an office of liaison between the armed services and all forms of transportation.

Among those paying tribute to Mr. Budd, whose retirement as president of the railroad takes effect on August 31, was Chicago's Mayor Martin H. Kennelly, who also stressed the service which Mr. Budd had rendered to the public in general as well as to the railroad industry. Mayor Kennelly expressed regret "that people in politics don't give [the railroads] the assistance and backing they ought to have" and which "is necessary to preserve our free enterprise system."

Fred G. Gurley, president of the Atchison, Topeka & Santa Fe, lauded Mr. Budd for his quality "for finding the solution to whatever problem is before him" rather than seeking the blame. A. H. Schwietert, traffic director of the Chicago Association of Commerce, stressed the gains which Mr. Budd had brought to shippers, who, he said, are "not interested in operating techniques, but in the results." Edward Eagle Brown, chairman of the board of the First National Bank of Chicago, stated that the Burlington president had "shown his mettle" in the depression "when the railroad industry was in a very gloomy mood," setting to work brilliantly "to show that the railroads could pull themselves out" and survive under private management and ownership.

Others who praised the accomplishments of the Burlington chief were General Robert E. Wood, who served with Mr. Budd in Panama, Walter F. Mullady of Decatur Cartage Company, Chicago, and R. M. Hitshew, freight traffic manager of the Santa Fe. Mr. Hitshew, who is president of the Traffic Club of Chicago, presented to Mr. Budd a gold lifetime club membership certificate.

Firemen's Demand "Shameful," Emergency Board Is Told

"I can hardly conceive of a more shameful proposal than that high-priced firemen should be paid a day's pay for running a hundred miles in a matter of about two hours in order to do a few minutes work," Howard Neitzert, chief counsel for the railroads, said on August 23 in his concluding remarks before the three-man "fact-finding" board which has been hearing evidence and arguments since June 27 on the demand of the Brotherhood of Locomotive Firemen & Enginemen for, among other things, an extra fireman on Diesel-electric locomotives. Extra firemen on Diesels, Mr. Neitzert said, "wouldn't be worth 25 cents a day to the railroads or the public. The only work the extra fireman could perform would consist merely of pushing a button to blow down the steam generator and on rare occasions resetting a ground relay or a switch in the engine room—trivial duties now performed without hardship by the firemen already assigned to the locomotives."

Charging that the union's claim that an additional man was needed in the interests of public safety, efficiency and economy of operation was "nothing but pious talk to camouflage their selfish interests," Mr. Neitzert said "the firemen's organization is concerned only with jurisdictional rivalries and an ambitious scheme to extend its power, wealth and influence." The present demands of the firemen, he added, represent their third attempt "to destroy the productiveness and efficiency of Diesel locomotives by

loading them down with unnecessary and needless firemen. It must be apparent that the railroads cannot accept any labor organization as the representative of the general public or as the guardian of the public interest in matters of this kind. Neither the railroads nor the general public can countenance strikes or threats of strikes to enforce the views of this or any other employee organization on public safety, efficiency or economy of operations."

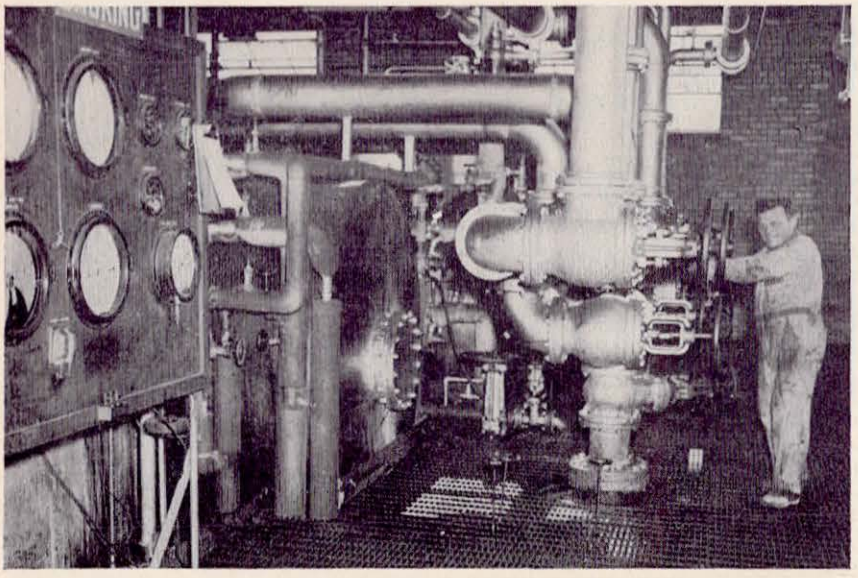
"The firemen's organization has a legitimate interest in the hazards of employment of its members," he continued, "but the railroads cannot share with this or any other organization, either as a practical matter or under limitations of law, their responsibility for efficiency, economy and safety of operations, or their freedom and right to discharge that responsibility as they deem necessary." Mr. Neitzert cited the union's testimony before the board as proving that "Diesel operation is safe and efficient under existing practices, that Diesel transportation is by far the safest and most reliable transportation that has yet been devised and that no ascertainable contribution would be made to the safety of Diesel movements by the assignment of an additional fireman to the engine rooms of this type of power. I can name trucking companies that have more accidents in one year than Diesel locomotives in road service have had in 14½ years, according to the union's own testimony."

The hazards to firemen on this type of power, he said, consist mainly of minor accidents, such as shutting doors or windows on their fingers. "It is apparent that the firemen's organization has created straw men and scarecrows of so-called hazards in an attempt to divert attention from the fact that there is nothing on a Diesel-electric locomotive for a second fireman to do. The most discouraging aspect of the whole situation lies in the fact that the union's true motives are always cloaked in insincere and pious representations as to its interest in safety, efficiency and economy of operations."

In concluding the hearings on August 23, the board announced that it would submit its recommendations on the union's demands to President Truman on September 19.

Bruce E. Dwinell, general attorney of the Chicago, Rock Island & Pacific, was the last witness to take the stand for the railroads. He told the board in testimony that preceded the concluding remarks by Mr. Neitzert, that the employment of an extra fireman, as demanded by the B. of L. F. & E., would add over $40,000,000 a year to the railroads' payroll costs. "Although the union representatives contend that an extra fireman on Diesels would have a beneficial effect on efficiency and economy of operation," he said, "they did not attempt, and could not have succeeded had they tried, to show any monetary saving that would result. The organization, asserting its alleged right to negotiate as to measures to improve efficiency and economy, shows by its acts the fundamental defect in its position when it does not even attempt to measure costs against benefits."

What the union actually proposes, Mr. Dwinell went on, "is that the railroads adopt wasteful and inefficient practices which will result inevitably in increased freight rates and possible diversion of railroad traffic to competing forms of transportation. Loss of traffic means, of course, loss of firemen's jobs. The granting of this proposal of the firemen's union would be but one more step toward the conditions which produce unemployment."



C. & O. TO TEST PENTA-TREATED CROSSTIES.—The Chesapeake & Ohio, Pere Marquette district, intends to install 15,000 mixed hardwood crossties treated with pentachlorophenol, to test the effectiveness of this preservative under service conditions. The ties are being treated for the road by the Joslyn Manufacturing & Supply Co. at its Franklin Park (Chicago) treating plant. A control room of the plant in shown in the picture. The pentachlorophenol is being furnished by the Dow Chemical Company Midland, Mich. Of the 15,000 ties, 5000 are to be treated with 5 per cent pentachlorophenol in petroleum oil, and the remainder with a mixture containing 5 per cent pentachlorophenol, 45 per cent petroleum oil and 50 per cent creosote

Rejects Request for New Lake Michigan Rail-Ferry Routes

Division 3 of the Interstate Commerce Commission has dismissed a complaint whereby the Ahnapee & Western and the city of Sturgeon Bay, Wis., sought to have the commission require the Ann Arbor to make that city one of its Lake Michigan car-ferry landings for the purpose of establishing new interchange and joint-rate arrangements with the Ahnapee. The proposed arrangements would have permitted the Ahnapee to avoid sharing with the Kewaunee, Green Bay & Western the revenue on traffic moving via the car ferries to and from points on its line.

Under present arrangements, the car ferries pick up and discharge the traffic at Kewaunee, Wis., and the route to and from Ahnapee points to that landing involves an interchange with the K.G.B. & W. at Casco Junction, Wis. The latter road's divisions of rates on the traffic interchanged during the period from June 1, 1947, through September, 1948, totaled $40,286, the commission said. Its adverse ruling was based on findings that the complainants had "failed to sustain their allegations" that the refusal of the Ann Arbor to join in the proposed new interchange arrangements was "unduly discriminatory, or unjustly prejudicial to the complainants, or that such interchange is necessary or desirable in the public interest, or that the proposed interchange facility, if established, would provide sufficient business to justify its construction and maintenance." The case was docketed as No. 3000.

House Will Get Toned Down "Radio-Rules" Bill

The House committee on interstate and foreign commerce has voted to accept the amendments suggested by the Interstate Commerce Commission and thus limit the scope of the pending bill, H.R.378, to broaden section 25 of the Interstate Commerce Act. The toned-down version of the bill will be reported favorably to the House by the committee. The report had not been filed when this issue went to press.

The original version of the bill, introduced by the committee's chairman, Representative Crosser, Democrat of Ohio, would broaden section 25, which now contains provisions of the so-called Signal

Inspection Act of 1937, to give the commission authority also over installations of radio and other train-communication systems, and over all railroad operating rules. The toned-down version approved by the committee would still give the commission authority to require installations of radio and other train-communication systems, but its authority to prescribe train-operating rules would be confined to rules "in connection with" such installations and installations of signaling devices over which the commission already has authority under the present law.

The committee's vote on the bill amounted to an upholding of one of its subcommittees, headed by Representative Beckworth, Democrat of Texas, which had recommended the toned-down version. After the subcommittee's report was filed, the committee held public hearings at which it received further presentations from members of the I.C.C. At those hearings, the commission amendments were supported by Commissioners Splawn and Johnson, although the former, as chairman of the commission's legislative committee, suggested for the amendments "alternative language" to that previously submitted by him to the subcommittee and incorporated by the latter in its version of the bill (see *Railway Age* of August 13, page 74). The "alternative language" was accepted by the full committee. Meanwhile, Commissioner Patterson to whom the commission's Bureaus of Safety and Locomotive Inspection report, supported the original version of the bill.

The original version has been supported by railroad labor organizations as a "safety" measure and assailed by representatives of management as a "make-work" measure. While the railroads conceded that the commission amendments "improved" the bill, it remained their position that "no bill" should be reported to the House by the committee. Reporting the committee's failure to accept the original version, the August 20 issue of "Labor," organ of 15 railroad unions, said that the interested union leaders have "in no way given up the battle for real safety legislation." The report added that "though final strategy has not yet been worked out, the chiefs are considering an all-out effort to persuade the House to reverse its committee and to enact the original Crosser safety bill."

Freight Car Loadings

Loadings of revenue freight in the week ended August 20 totaled 731,215 cars, the Association of American Railroads announced on August 25. This was an increase of 3,186 cars, or 0.4 per cent, over the previous week, a decline of 169,448 cars, or 18.8 per cent, below the corresponding week last year, and a drop of 169,680 cars, or 18.8 per cent, below the equivalent 1947 week.

Loadings of revenue freight for the week ended August 13 totaled 728,029 cars, and the summary for that week as compiled by the Car Service Division, A.A.R., follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, August 13

District	1949	1948	1947
Eastern	124,227	155,643	157,847
Allegheny	139,608	183,424	187,456
Pocahontas	48,410	75,786	73,540
Southern	109,218	134,835	128,087
Northwestern	134,671	140,879	146,405
Central Western	115,436	133,470	144,028
Southwestern	56,459	67,239	68,942
Total Western Districts	306,566	341,588	359,375
Total All Roads	728,029	891,276	906,305
Commodities:			
Grain and grain products	55,124	54,336	63,020
Livestock	9,878	10,181	11,722
Coal	116,765	191,204	174,541
Coke	8,943	14,901	13,918
Forest products	41,243	53,411	48,496
Ore	71,313	75,510	82,752
Merchandise l.c.l.	90,611	105,582	115,260
Miscellaneous	334,152	386,151	396,596
August 13	728,029	891,276	906,305
August 6	716,824	878,647	905,244
July 30	723,810	894,375	921,591
July 23	718,516	882,129	919,928
July 16	724,100	892,080	919,735
Cumulative total 32 weeks	22,942,580	26,021,117	26,991,293

In Canada.—Carloadings for the week ended August 13 totaled 74,192 cars, compared with 69,048 cars for the previous week, and 75,971 cars for the corresponding week last year, according to the compilation of the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
August 13, 1949	74,192	28,411
August 14, 1948	75,971	32,861
Cumulative totals for Canada:		
August 13, 1949	2,313,152	989,470
August 14, 1948	2,392,305	1,177,445

Canadian Transport Board Confirms Ex Parte No. 168

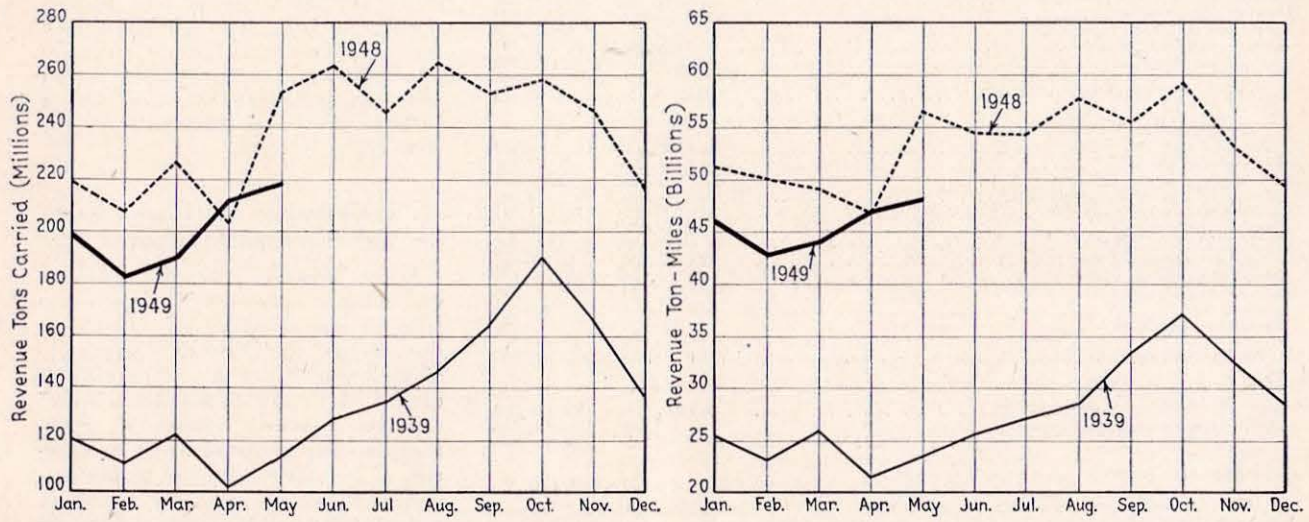
The Board of Transport Commissioners for Canada has confirmed most of the international freight rate changes recently authorized by the Interstate Commerce Commission in Ex Parte No. 168, so far as international rates are increased. The Canadian board, in its order, said it is in the public interest "that the continuity of joint through rates from points in the United States to points in Canada, and vice versa, and the maintenance of the parity of port relationships should be preserved."

Metzman Warns of Inroads By Subsidized Competition

There is a great possibility of drastic inroads being made into the railroads' business by competitors unless everyone employed by railroads works to continue to improve the good things that have been developed in the past, Gustav Metzman, president of the New York Central, said on August 24. Speaking before several thousand employees observing "New York Central Day" at the Railroad Fair in Chicago, he warned them "not to be satisfied simply to accept our railroad industry as a matter of course."

The special program at the fair included also talks by other officers of the railroad and a drawing of prizes.

Mr. Metzman pointed out that "to a major degree [the railroad industry is]



Revenue Tons and Revenue Ton-Miles—Compared with 1939 and 1948

told by governmental agencies what working practices we must provide, what wages we must pay and how much money we can charge for the service rendered. In competitive transportation agencies there is not the same degree of regulation. In fact, you railroad employees, as taxpayers, are used as the vehicle for the payment of subsidies to transportation companies which are competitive with your company. A part of the money which you pay as taxes from your paycheck which you receive from the railroad goes to the construction of or the maintenance of highways, airports and the like. These facilities are used by agencies which do not fully pay their keep, which are not obliged to maintain their own rights of way, and which, in that respect and others, are subsidized from your wages."

Another speaker was L. W. Horning, vice-president personnel and public relations, who said that in addition to "fair treatment of our industry by government and equality of opportunity with our competitors, more freight and passenger traffic is what we need right now. I hope that all of us and our families will resolve to go out and get that traffic, and once we get it, let us by friendly, courteous, safe and efficient service hold on to it . . . No matter what our job may be, we are members of the New York Central good-will department, and it is our duty to promote good will among ourselves, between our railroads and its passengers and shippers and in the communities where we live and work."

Selected Income and Balance-Sheet Items of Class I Steam Railways

Compiled from 128 reports (Form IBS) representing 132 steam railways.
(SWITCHING AND TERMINAL COMPANIES NOT INCLUDED)

United States

Income Items	For month of May 1949	For month of May 1948	For the five months of 1949	For the five months of 1948
1. Net railway operating income	$57,595,284	$90,176,066	$250,774,200	$285,928,717
2. Other income	15,220,599	15,648,565	81,614,313	89,058,077
3. Total income	72,815,883	105,826,631	332,388,513	374,986,794
4. Miscellaneous deductions from income	3,186,305	4,249,721	16,293,649	19,116,727
5. Income available for fixed charges	69,629,578	101,576,910	316,094,864	355,870,067
6. Fixed charges:				
6–01. Rent for leased roads and equipment	9,398,791	9,843,069	46,187,332	51,890,177
6–02. Interest deductions[1]	24,841,324	24,345,196	123,434,055	121,492,851
6–03. Other deductions	199,742	147,047	945,376	714,951
6–04. Total fixed charges	34,439,857	34,335,312	170,566,763	174,097,979
7. Income after fixed charges	35,189,721	67,241,598	145,528,101	181,772,088
8. Other deductions	2,980,682	3,177,855	15,267,628	15,894,610
9. Net income	32,209,039	64,063,743	130,260,473	165,877,478
10. Depreciation (Way and structures and Equipment)	33,818,847	31,090,411	165,502,199	152,626,478
11. Amortization of defense projects	1,373,441	1,362,078	6,854,324	7,152,426
12. Federal income taxes	20,565,848	28,136,690	107,807,585	119,680,281
13. Dividend appropriations:				
13–01. On common stock	28,478,263	27,176,522	77,818,682	69,520,949
13–02. On preferred stock	9,516,454	12,053,517	32,583,291	31,223,999
Ratio of income to fixed charges (Item 5 ÷ 6—04)	2.02	2.96	1.85	2.04

United States

Selected Expenditure and Asset Items	Balance at end of May 1949	Balance at end of May 1948
17. Expenditures (gross) for additions and betterments—Road	$130,763,560	$117,788,650
18. Expenditures (gross) for additions and betterments—Equipment	465,713,267	342,757,180
19. Investments in stocks, bonds, etc., other than those of affiliated companies (Total, Account 707)	518,768,987	542,601,998
20. Other unadjusted debits	139,252,304	160,765,808
21. Cash	770,780,853	895,702,542
22. Temporary cash investments	912,122,973	903,560,729
23. Special deposits	104,131,512	110,932,266
24. Loans and bills receivable	762,148	12,610,077
25. Traffic and car-service balances—Dr	54,683,923	56,886,789
26. Net balance receivable from agents and conductors	123,067,831	135,784,610
27. Miscellaneous accounts receivable	297,051,396	342,253,441
28. Materials and supplies	868,221,852	806,394,123
29. Interest and dividends receivable	16,473,489	20,851,319
30. Accrued accounts receivable	150,370,340	173,048,797
31. Other current assets	39,299,756	41,025,181
32. Total current assets (items 21 to 31)	3,336,966,073	3,499,099,874
Selected Liability Items	**1949**	**1948**
40. Funded debt maturing within 6 months[2]	$124,189,139	$127,266,777
41. Loans and bills payable[3]	3,300,000	3,175,000
42. Traffic and car-service balances—Cr	77,836,306	93,892,854
43. Audited accounts and wages payable	558,132,570	600,111,890
44. Miscellaneous accounts payable	189,505,090	201,883,049
45. Interest matured unpaid	31,156,092	32,718,650
46. Dividends matured unpaid	8,747,133	7,953,390
47. Unmatured interest accrued	70,295,337	66,980,467
48. Unmatured dividends declared	48,772,956	50,850,169
49. Accrued accounts payable	177,413,279	202,469,825
50. Taxes accrued	743,347,493	660,434,080
51. Other current liabilities	67,429,719	91,640,184
52. Total current liabilities (items 41 to 51)	1,976,235,975	2,012,309,558
53. Analysis of taxes accrued:		
53–01. U. S. Government taxes	597,891,600	522,829,525
53–02. Other than U. S. Government taxes	145,455,893	137,604,555
54. Other unadjusted credits	271,495,416	306,663,920

[1] Represents accruals, including the amount in default.
[2] Includes payments of principal of long-term debt (other th an long-term debt in default) which becomes due within six months after close of month of report.
[3] Includes obligations which mature not more than one year after date of issue.
Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission.
Subject to revision.

P.R.R.'s Principal Trains Now All Diesel-Operated

All the Pennsylvania's principal passenger and freight trains are now operated by Diesel-electric or electric locomotives, the road announced this week in reporting the completion of delivery on its postwar orders for 145 road-service Diesels. In addition, the Pennsylvania said, it has put in service 430 Diesel-electric switching locomotives and the last 19 such locomotives will be received from the builders in a few weeks. Sixty-three passenger and 82 freight Diesels are operating on trains connecting Chicago, St. Louis, Mo., Cincinnati, Ohio, Cleveland and Detroit, Mich., with eastern cities, as well as on some shorter runs.

New Haven Parlor Cars to Be Returned to Pullman Operation

Parlor cars of the New York, New Haven & Hartford, which, since February, 1948, have been manned by the railroad's own personnel, will return to Pullman Company operation on September 1.

J. Frank Doolan, vice-president, operations, said the change is "to secure more flexibility in the use of the parlor cars. . . "We shall be able to provide even better service to the public, in that with our cars in the general pool of the Pullman Company there will be opportunity of added use of this modern streamlined equipment and the trained personnel. Porters and other attendants who will return to the Pullman payroll will retain such seniority as they held on Pullman rolls when they went on the New Haven payrolls."

U. S. Chamber Continues Drive To Cut Transport Taxes

As an "added stimulus for action toward prompt removal of wartime excise taxes on transportation and communication services" the Chamber of Commerce of the United States has issued a leaflet entitled "Let's Cut Excise Taxes Now!" Chamber President Herman W. Steinkraus recently addressed letters to chairmen of the House ways and means committee and the Senate finance committee, endorsing pending legislation to eliminate excise taxes, including those on passen-

ger travel, freight transportation, and telephone and telegraph service.

"During the war," the leaflet says, "every available passenger seat, freight vehicle, telephone and telegraph facility was urgently needed to coordinate production and to transport troops and equipment. It was necessary to discourage the unwarranted use of over-burdened communication and transportation carriers. Special excise taxes were imposed for that purpose. These same facilities, so urgently needed then, are no longer over-burdened. The wartime need for discouraging their use no longer exists, but the depressing effect of these taxes on peacetime business continues."

The leaflet is being made available by the chamber's Transportation and Communication Department Committee for distribution by trade associations and others interested.

Justice Department Files Another Rate Complaint

Another complaint assailing railroad rates charged on government shipments has been filed with the Interstate Commerce Commission by the Department of Justice. The assailed rates are those charged on shipments of imported crude bauxite ore which have been moving since June, 1947, from Mobile, Ala. to Bynum and Huntsville Arsenal in that state, and from New Orleans, La., to Bynum since February 5, 1948.

The shipments were made by the Bureau of Federal Supply, the ore being among "critical and strategic" materials which that agency is "stock-piling," the Justice Department announcement said. "Our investigation," the announcement added "discloses that the railroads assess much higher rates for the transportation of the government's bauxite ore than they do for the transportation of the same commodity between other points. The rates assessed also are higher than the rates applicable on shipments of chrome and manganese ores between the same points and between other points in the same general territory although the value of the bauxite ore is less."

The complaint names as defendants seven railroads as follows: Southern; Alabama Great Southern; Alabama, Tennessee & Northern; Gulf, Mobile & Ohio; Louisville & Nashville; Nashville, Chattanooga & St. Louis; and New Orleans & North Eastern. Reparations are sought.

Coordinated Trucking Service Saves Money, Farmers Report

By pooling livestock for trucking to market and back-hauling needed supplies, the Farmers Union Federated Cooperative Shipping Association of Minot, N. D., has effected savings and improved service for its members, a recent study by the Farm Credit Administration, U. S. Department of Agriculture shows.

The report said that by using trucks, which average 19 hours as compared with 48 hours by rail from Minot to the South St. Paul, Minn. livestock market, shrinkage has been reduced and some of the gamble from shifting market prices has been eliminated. By back-hauling oil, feed and other supplies for its member elevator and farm supply associations, additional savings are made, it said. In addition, the shipping cooperative feeds, waters and beds livestock during the time it is being assembled. It also provides farmers with market quotations, handles all accounting and other transportation details from the time the livestock is picked up at the farms until the farmer receives the proceeds of the sales.

Commerce Department Gets Bureau of Public Roads

The Bureau of Public Roads became a unit of the Department of Commerce this week, Congress having taken no action to disapprove the transfer which was proposed by President Truman on June 20 under provisions of the Reorganization Act of 1949. That act provides that a plan proposed by the President shall take effect 60 days after it is submitted to Congress, if there has not been passed by either the Senate or House a resolution expressing disapproval of the plan.

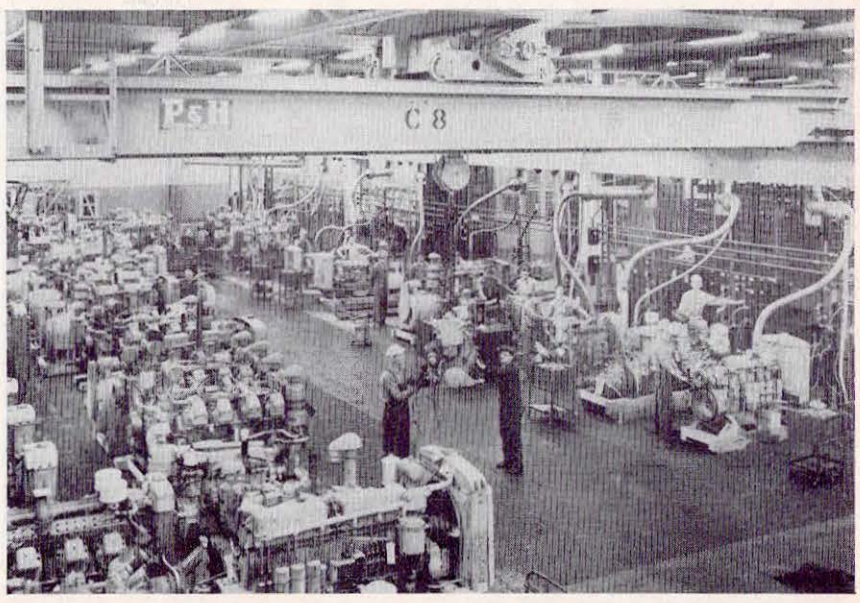
The roads bureau, as the Public Roads Administration, was formerly a unit of the Federal Works Agency. Last month, however, it was transferred along with other units of F.W.A. to the new General Services Administration which was created by the Federal Property and Administrative Services Act to take over various

Truckers to "Infiltrate" P.R.R.

The newly formed "policy committee" of the Pennsylvania Motor Truck Association has launched a movement to have its members "infiltrate" the Pennsylvania, through purchase of stock, with the ultimate goal of "obtaining a voice in management," according to the August 8 issue of Transport Topics, weekly publication of American Trucking Associations, Inc.

The movement, Transport Topics says, is headed by Ted V. Rodgers, of Eschenbach & Rodgers, Scranton, Pa., and James P. Clark of Highway Express Lines, Inc., of Philadelphia, Pa. "It is the aim of our organization," Mr. Rodgers is quoted as having said, "to win a voice in the management and policies of the Pennsylvania Railroad by having our members become stockholders of the Pennsylvania lines." Mr. Clark is reported as having said that he and other truckers who have already purchased P. R. R. stock will attend a special meeting of stockholders on September 20; but since that meeting will consider only special matters he indicated that they might not get a chance "to express their views fully" until the next annual meeting in 1950.

Mr. Clark was reported in *Railway Age* of May 14, page 60, as one of the founders of the Pennsylvania Motor Truck Educational League which—also according to Transport Topics—is prepared to spend $250,000 to jam through the Pennsylvania legislature a bill increasing that state's truck weight and size limits. Defeat of such a bill at the 1949 session, for which the truckers blame the railroad is understood to be behind the stock purchase plan.



CATERPILLAR DEDICATES NEW DIESEL FACTORY—Marking completion of the first major phase of an extensive expansion program, the Caterpillar Tractor Company recently dedicated a new factory at its plant in Peoria, Ill. The new structure, designated as Building KK, and having an area of 925,000 sq. ft., was designed, erected and equipped for one specific operation—the economical manufacture of the Caterpillar line of Diesel engines. The photograph shows one of the test areas of the new building

"housekeeping," procurement, and other government activities, including those relating to the purchase of transportation services (see *Railway Age* of July 9, page 139). Another of President Truman's reorganization plans, which also became effective this week makes the chairman of the United States Maritime Commission the "chief executive and administrative officer" of that commission.

I. C. Plans Coal-Saving Drive

The Illinois Central, which spent nearly $20 million for coal during 1948, will launch a "save-a-lump" campaign on September 1, aimed at obtaining the maximum energy from every pound of coal. A special car will tour the railroad to bring to employees lectures and audio-visual aids on building fires, controlling drafts and smoke, and otherwise saving fuel. S. F. Lynch, I. C. general manager, points out that 75 lb. of coal are wasted every minute the relief valve on a locomotive remains open and that even the whistle "toot" costs money in use of coal. All divisions will compete for a fuel conservation trophy to be presented by C. F. Duggan, vice-president.

1949 First-Quarter Loading Estimates 12.2 Per Cent High

The 13 Shippers Regional Advisory Boards overestimated car loadings for the first quarter of 1949 by 12.2 per cent, according to the latest comparison of forecasts with actual loadings issued by A. H. Gass, chairman of the Car Service Division, Association of American Railroads. The variations of overestimates by individual boards ranged from 20.8 per cent to 4.6 per cent, while variations by commodities ranged from an overestimate of 22.2 per cent in the case of citrus fruits to an underestimate of 21.9 per cent on sugar, syrup and molasses.

The report shows that there were overestimates in 24 commodity groups and underestimates in 8. In addition to citrus fruits, there were overestimates of 20.8 per cent on machinery and boilers; 20.6 per cent on lumber and forest products; 19.9 per cent on coal and coke; and 18.5 per cent on petroleum and petroleum products. The larger underestimates, in addition to that on sugar, syrup and molasses, were 10.8 per cent on frozen foods and vegetables and 7.7 per cent on automobiles and trucks.

COMPARISON NATIONAL FORECAST WITH ACTUAL CARLOADINGS—FIRST QUARTER 1949

Board	Estimated	Actual	Prcntg Over Est'd.
Central Western	285,651	260,459	8.8
Pacific Coast	354,529	284,732	19.7
Pacific Northwest	227,346	180,013	20.8
Great Lakes	460,233	435,384	5.4
Ohio Valley	1,031,546	831,783	19.4
Mid-West	864,278	824,223	4.6
Northwest	266,976	250,720	6.09
Trans-Mo-Kansas	386,899	356,438	7.9
Southeast	963,416	885,521	8.1
Southwest	521,402	468,174	10.2
New England	163,190	139,181	14.7
Atlantic States	857,979	709,573	17.3
Allegheny	1,191,559	959,853	14.4
Totals	7,505,002	6,586,055	12.2

Representation of Employees

The National Mediation Board has certified the American Railway Supervisors Association as the representative of subordinate officers in the maintenance of way and structures department of the New York, Chicago & St. Louis; the Brotherhood of Railway & Steamship Clerks, Freight Handlers, Express & Station Employees as the representative of the clerical, office, station and storehouse employees of the Illinois Northern, and the Brotherhood of Maintenance of Way Employees as the representative of the maintenance of way employees of the Illinois Northern. These employees were not previously represented by any organization.

The Transport Workers Union of America, C.I.O., has been designated by the board to represent the clerical, office, station and storehouse employees of the Hudson & Manhattan as the result of a recent election. Previously, representation of these employees had been divided between four organizations; in addition to the T.W.U.A. these included the Utility Workers of America, C.I.O., the United Transport Service Employees and the Allied Craft Group Employees. The T.W.U.A. had invoked the board's services, and before the election was held the board determined what employees of this carrier are properly in the craft named.

The Order of Railway Conductors has been designated to continue to represent the road conductors of the Elgin, Joliet & Eastern, as the result of a recent election certified by the N.M.B. in which that union received 42 votes to 32 for the challenging Brotherhood of Railroad Trainmen.

New Equipment for P.R.R.'s "Spirit of St. Louis"

The newly-equipped "Spirit of St. Louis" of the Pennsylvania is now in regular daily operation. Three complete sets of equipment costing, with their Diesel-electric locomotives, $5,850,000, are required to provide 20-hr. service between New York and St. Louis, Mo.

Every feature car of the newly equipped train—dining, lounge and observation—and every type of private room accomodation—drawing rooms, compartments, bedrooms, duplex rooms and roomettes—has been completely redesigned as to comfort, convenience and attractiveness. Three new-type bedrooms, for one or two passengers, offer a choice of arrangements for day and night use and beds across or lengthwise of the car. Each sleeping room with accomodations for more than one passenger has a separate toilet annex having complete lavatory facilities, and single occupancy rooms have improved lavatory facilities folding away out of sight when not in use. Section-type cars are also provided, as is a twin-unit dining car.

"Georgian" Breaks Previous Passenger Record in July

The streamlined "Georgian," operated by the Chicago & Eastern Illinois, Louisville & Nashville and Nashville, Chattanooga & St. Louis on an overnight schedule between Chicago and Atlanta, Ga., broke all previous records for the number of passengers carried when 16,316 revenue passengers used the train in July, 1949. The "Georgian," which was placed on its Chicago-Atlanta run in June, 1948, carried 13,550 passengers in July a year ago. 20.4 per cent under the July, 1949, figure. The lowest level of revenue passenger travel for the train was in March, 1949, when 10,867 used it.

INCULCATING CAREFUL SWITCHING—Everywhere you look on the property of the Terminal Railroad Association of St. Louis—on switch shanties, interlocking towers and grade crossing shelters—there appears the following sign: "FREIGHT CARS ARE THE 'LUNCH BOXES' OF THE NATION, CARRYING NECESSITIES OF NATIONAL AND INDIVIDUAL LIFE. PROTECT CARS AND CONTENTS BY CAREFUL SWITCHING. GOOD SWITCHMEN DO THEIR WORK WITHOUT ROUGH HANDLING."

Gould Announces Latest Storage Battery Course

A 5-day course on the care, maintenance and charging of storage batteries will be conducted by the Gould Storage Battery Corporation at the firm's Trenton, N. J., plant on November 14-18, inclusive. In the course, the 23rd in Gould's program of instruction to battery users, seventeen different lectures by field engineers and outside consultants will be presented. Expenses, including hotel, transportation and meals (except lunches, which will be supplied by Gould), are to be paid by the companies sending students. As in the past, the students are given periodic tests and awarded diplomas at the end of the course.

Baggage Transfer Plan Popular

Five railroads have extended until Oct. 15 the trial period of a train-to-train hand baggage transfer service at St. Louis, Mo., involving trains to and from New York and Washington. The plan was inaugurated on a two-month trial basis on June 15, and has been extended as a result of favorable public response. The participating railroads are the New York Central, Baltimore & Ohio, St. Louis-San Francisco, Missouri-Kansas-Texas and the Missouri Pacific.

Under the plan, the transfer of luggage is arranged by porters on trains approaching St. Louis. The pieces of baggage are tagged, showing the outbound train, number of the sleeping car and the space held. Upon arrival at St. Louis, the pre-tagged luggage is taken from the arriving train and placed in the proper sleeping accommodation of the outbound train by a station "red cap," who collects a 15-cent fee for each piece handled.

ORGANIZATIONS

A.A.R. Communications Section Convenes September 27-29

The 26th annual session of the Communications Section of the Association of American Railroads will be held at Wentworth-by-the-Sea Hotel, Portsmouth, N. H., September 27-29. As part of the program, nine committees of the section will present 79 reports for consideration, these reports covering all phases of communications from pole-line construction and maintenance to micro-wave relay systems, including the economics of modern communication facilities. In addition, four special technical papers will be presented to the section by D. E. Noble, vice-president, Communications and Electronics Division of Motorola, Inc.; L. L. Carter, assistant chief engineer, Anaconda Wire & Cable Co.; R. L. Hanson, technical staff member of the Bell Telephone Laboratories; and J. D. McLean, manager, Industrial Division, and W. H. Forster, section engineer, Engineering Department, Philco Corporation. There will also be exhibits by a large number of manufacturers of many new developments in the communications field.

Signal Section Convention In Chicago, September 12-14

Methods of facilitating train movements and of reducing operating expenses by the use of modern signaling facilities will be the principal subjects discussed at the annual meeting of the Signal Section of the Association of American Railroads, at the Edgewater Beach Hotel, Chicago, September 12-14.

Much of this information will be included in the report of the Committee on Economics of Signaling, which is to be presented at 11 a.m., September 13. In addition to the reports of 11 other committees on technical subjects, the program includes addresses on Monday morning by F. S. Schwinn, assistant chief engineer of the Missouri Pacific Lines, Houston, Tex.; on Tuesday morning by J. H. Aydelott, vice-president, A.A.R., and on Wednesday morning by W. J. Patterson, commissioner, Interstate Commerce Commission. In conjunction with the convention, an exhibition will include displays of products by 27 manufacturers.

The **Trans-Missouri-Kansas Shippers Board** will hold its eighty-fouth regular meeting on September 14 and 15, at the Mayo Hotel, Tulsa, Okla.

The next meeting of the **American Association of Baggage Traffic Managers** will be held at Seattle, Wash., September 27-29.

The **Car Foremen's Association of Chicago** will hold its first meeting of the season on September 12 at 8 p.m., at the LaSalle Hotel, Chicago. G. V. Easley of the Westinghouse Air Brake Company will present an address entitled "Electro-Pneumatic Brakes."

The **National Railway Historical Society's** fourth annual railroad excursion over the historic "Canal Line" of the New York, New Haven & Hartford, will be run to Northampton, Mass., on September 18.

The fall meeting of the **New England Shippers Advisory Board** will be held on September 28-30, at the Mount Washington Hotel, Bretton Woods, N. H. All phases of rail transportation service will be reviewed at this meeting.

Veterans who served with the **759th Railway Operating Battalion** during World War II will hold their third annual reunion in St. Louis, Mo., September 30 and October 1-2, at the Hotel York. Reservations can be made by writing to Henry Weiler, 1506 Missouri Pacific building, St. Louis 3.

The **Military Railway Service Veterans** will hold their third annual reunion in Pittsburgh, Pa., on Saturday, September 24, at the William Penn Hotel. Major General Carl R. Gray, Jr., honorary director-general of the veterans' organization, will be the principal speaker at a 7:30 p.m. banquet, which will climax the all-day program. Arrangements for reservations are being handled by Fred W. Okie, president of the Bessemer & Lake Erie, 700 Union Trust building, Pittsburgh.

EQUIPMENT AND SUPPLIES

SIGNALING

The New York Central has placed an order with the General Railway Signal Company for 88 sets of radio communication equipment, 81 sets for locomotive and 7 sets for wayside installation. This equipment will be used in hump yard service at Syracuse, and in yard and terminal service at Rochester, N. Y., Buffalo, Bronx and Albany.

CONSTRUCTION

St. Louis-San Francisco.—This road will begin construction within the next 90 days of a one-story, 20-bedroom hotel near its passenger station at Magnolia, Ala., to be used by train crews operating in and out of that city. The building will be 66 ft. by 139 ft., of concrete block construction, and contain a 20-ft. by 33-ft. recreation room. The new hotel will replace one destroyed by fire in July, 1948.

South Buffalo.—This road has applied to the Interstate Commerce Commission for authority to construct in Lackawanna, N. Y., Blasdell and Hamburg an 1.8-mi. extension to its line which would provide rail service for a plant which the Ford Motor Company proposes to build in Hamburg.

Union Pacific.—This road has begun laying 7,128 ft. of additional yard trackage and a large number of new switches at Green River, Wyo. The project, involving the rearrangement and extension of trackage at the east end of the Green River yard, is intended to expedite the handling of freight trains through the terminal.

OVERSEAS

Survey Ground for Proposed Rhodesia-East Africa Railroad

The Economic Cooperation Administration has announced approval of a technical assistance project to help Great Britain make a preliminary survey in connection with the proposed construction of a railroad link between Rhodesia and East Africa. Experts selected by an organization of American engineering firms and an English engineering firm will spend four months in Africa making a preliminary survey along several suggested routes between the Rhodesian and East African railroad systems. The project is being financed jointly by E.C.A. and the British government.

Cook Succeeds Kay as Editor of Railway Gazette

B. W. C. Cook has been appointed to succeed the late John Kay, whose death was reported in the *Railway Age* of July 23 and July 30, as editor of the Railway Gazette, Diesel Railway Traction, the Railway Magazine and the Universal Directory of Railway Officials and Railway Yearbook, all published at London, England.

George Rollason, formerly joint managing director, has succeeded Mr. Kay as deputy chairman and managing director of Transport (1910) Limited, the company which owns the publications of which Mr. Cook is the new editor.

Peru.—The construction of a 300-mi., standard-gage railroad to link the Central and the Cerro de Pasco railroads, connecting Lima and the port of Callao with the navigable waters of the Ucayali river, a tributary of the upper Amazon,

has been ordered by the Peruvian government, it is understood. The new road, according to the report, will start at Tambo del Sol station on the Cerro de Pasco, 57 mi. from the smelter site of the Cerro de Pasco Copper Corporation at Oroya, and its terminal will be the Ucayali river port of Pucullpa. The estimated cost of the new road is $15,000,000.

Portuguese East Africa.—The Department of Ports, Railways and Transports at Mozambique, according to a recent issue of Foreign Commerce Weekly, wants to purchase the following equipment: 6 Garratt locomotives, 6 Santa Fe locomotives, 6 motor trolley cars, 530 40-ton "drop-side" open trucks, 100 40-ton closed trucks, 45 39,200-liter petroleum cars, 44 closed cars for transporting tobacco, 14 cattle cars, 11 water-tank cars and 28 passenger coaches (5 first class, 8 second class and 15 third class). Bids to supply the equipment should be sent to the department's purchasing section, Lourenco Marques, Mozambique, P.E.A.

SUPPLY TRADE

Directors of the **Yale & Towne Manufacturing Co.** have elected **Gilbert W. Chapman** president, to succeed **Calvert Carey,** who has resigned because of ill health. Mr. Chapman was president of the American Water Works Company before he became a Yale & Towne vice-president in June, 1948.

W. A. Brown, Jr., formerly vice-president of the compressed gas division of the **Liquid Carbonic Corporation,** with headquarters at New York, has been appointed vice-president and general manager, with headquarters at Chicago.

The **Westinghouse Electric Corporation** has announced the appointment of **John A. DeGroot,** formerly of the general contract department at Pittsburgh, Pa., as assistant to the Pacific coast district manager, with headquarters at San Francisco, Cal., succeeding **W. J. Howell,** who has been appointed assistant to the apparatus sales manager at Pittsburgh.

Samuel B. Applebaum has been appointed manager of the cold process water treating division of the **Cochrane Corporation,** Philadelphia, Pa. Mr. Applebaum also is vice-president of the Liquid Conditioning Corporation, an operating subsidiary of Cochrane.

The **Automatic Transportation Company,** Chicago, has added **Harry S. C. Folk** and **Joseph J. Powle** to the sales force of its factory branch sales office at 347 Madison avenue, New York, successor to Raymond L. Smith Associates. Mr. Folk, formerly a member of the Smith organization, will be in charge of railroad sales.

Stuart T. Hotchkiss has been appointed sales representative of the **Pressed Steel Car Company** at Chicago. Mr. Hotchkiss was formerly associated with Rochester Ropes, Inc., of Culpeper, Va.

The **Kaiser Company, Inc.,** has changed its name to the **Kaiser Steel Corporation,** with main offices at Oakland 12, Cal.

Frederick J. Fischer, sales representative of the **Simmons-Boardman Publishing Corporation,** publishers of *Railway Age* and other transportation papers, has retired after 30 years' service with the company. Mr. Fischer was born in Washington, D. C., on November 27, 1889. He attended Columbia University, the Cooper Institute, New York, the Mechanics Institute, New York, and Harriman University. He began his career in the engineering and manufacturing departments of the Western Electric Company and subsequently worked for the Westinghouse Electric & Manufacturing Co. as assistant superintendent of production, at the Newark, N. J., factory,

Frederick J. Fischer

and in the construction department of the American Telephone & Telegraph Co. He was draftsman, inspector, and assistant engineer, successively, in the electrical department of the New York Central and later president and chief engineer of the Fairbanks Electric Company, Stamford, Conn. Mr. Fischer joined Simmons-Boardman in 1919 as a sales representative, which position he held at the time of his retirement.

The following personnel changes were announced by **F. J. Aschenbrenner,** newly appointed assistant director of research and engineering of the **Air Reduction Sales Company: J. K. Hamilton** has been appointed manager of the apparatus research division; **H. O. Klinke,** assistant manager; **J. T. McKnight,** superintendent of production and services section; and **T. J. Cholis,** supervisor of patent section. These men are all on the staff of the Air Reduction research laboratory, Murray Hill, N. J.

Frank M. Mason, Jr., whose appointment as director of engineering for **Fairbanks, Morse & Co.,** with headquarters at Chicago, was reported in the *Railway Age* of August 20, joined that company in 1922 after graduation from Northwestern University, the Massachusetts Institute of Technology and Washington University. He was first employed in the

Frank M. Mason, Jr.

engineering department of the Indianapolis, Ind., plant and in 1923 was transferred to St. Louis, Mo., to organize a patent department. He entered the research division at Chicago in 1925, being promoted to assistant manager of that division in 1940. Mr. Mason was advanced to manager of the research division in 1946, the post he held at the time of his new appointment.

OBITUARY

Philip M. Guba, manager of sales, eastern area, Carnegie-Illinois Steel Corporation, a subsidiary of the United States Steel Corporation, died on August 18, in the New York Hospital, following an extended illness. He was 62 years old. Mr. Guba attended the University of Pennsylvania and received a degree in mechanical engineering from the Spring Garden Institute. In 1909 he joined the office of the sales division of the Jones & Laughlin Steel Corp. He later was manager of sales at New York for the Donner Steel Company, which was absorbed by the Republic Steel Corporation when that company was formed in 1930. Mr. Guba joined the United States Steel organization in 1933 as assistant manager, Detroit, Mich., sales office, Carnegie-Illinois Steel, and soon after was appointed manager. In 1938 he was appointed manager, Chicago district sales, and in 1939 was appointed manager of sales, eastern area, at New York.

FINANCIAL

Approves Burlington's New Chicago-Kansas City Route

Two August 18 reports by Division 4 of the Interstate Commerce Commission cleared the way for the Chicago, Burlington & Quincy to shorten its Chicago-Kansas City, Mo., main line by 22 mi. (see *Railway Age* of February 5, page 119). Arrangements approved in one of the reports contemplate acquisition of control and lease by the Burlington of the recently-organized Kansas City & Brookfield; construction by the latter of a 43-mi. section of the proposed new route; and acquisition by the Burlington of trackage rights over 16.05 mi. of Wabash line, which will also form part of the proposed new route. The Wabash line extends from Birmingham, Mo., to Missouri City Junction, while the line to be built by the Brookfield will extend from the latter point to Tina Junction. The other report authorized the K.C.&B. to issue $50,000 of capital stock, proceeds of which will be used in construction of the new line and for general corporate expenses. The issue is for the purpose of complying with the stock subscription requirements of the Missouri law.

The new K.C.&B. line is expected to cost $9,751,000. As described in the commission's report, it will be laid with 112-pound torsion-resisting rail and will require 2,992 lineal ft. of bridges. The maximum grade will be 0.8 per cent, and the maximum curvature will be 1 degree. The "most modern type" of centralized traffic control will be installed. Estimated construction time is 18 months.

Under the terms of the approved lease, the Burlington is to maintain, operate and use the Brookfield properties and furnish all necessary motive power and equipment. The agreement is to run for 10 years and thereafter until terminated by either party. As rental, the Burlington will pay all taxes, except those chargeable to investment account, which may be levied against the K.C.&B.; all expenses necessary to maintain the K.C.&B.'s corporate existence; amounts equal to allowances by the Bureau of Internal Revenue for amortization or depreciation or with respect to retirement or abandonment of any portion of the property; and a sum equal to all interest payable by the K.C.&B. on the outstanding loans incurred in connection with its line.

The Burlington estimates that the new route will increase its annual net revenue by $1,727,567. Among the improvements in service, the Burlington plans to operate "an entirely new modern train of the Zephyr type on an 8-hour daylight schedule between Kansas City and Chicago."

Summing up its findings, the commission said that the new route "will effect needed improvements in a route which gradually has been outmoded"; it will provide a shorter and "more efficient" route which will enable the Burlington "to render better service"; it will "secure more freight and passenger business than now handled"; and the public "will have the advantage of more efficient transportation service." Conditions for the protection of employees under the provisions of the so-called Washington Job Protection Agreement were prescribed.

Chicago Great Western.—*Stock and Income Debentures.*—Making a proposed report on further hearing in the Finance Docket No. 16068 proceeding, Examiner H. C. Howard has again recommended that Division 4 of the Interstate Commerce Commission deny this road's application for authority to issue $7,322,080 of 4½ per cent income debentures and 73,221 shares of $50-par common stock to be offered to holders of its outstanding 5 per cent preferred stock in exchange for their holdings. A previous proposed report in the proceeding, also adverse to the application, was made by Examiner Howard, and thereafter the commission reopened the case for the further hearing out of which the present report has come (see *Railway Age* of December 18, 1948, page 73).

In the present report, the examiner advised Division 4 to conclude that the issue and exchange of the proposed income debentures (a) would add to the Great Western's capital structure another and different type of security from those found desirable in the reorganization of the road under section 77 of the Bankruptcy Act; (b) would produce no proceeds for use by the applicant but would increase its outstanding debts; and (c) would vest the power to exercise stock control of the applicant in the common stock instead of the preferred stock where it now resides. Other recommended conclusions include one holding that "it is not in the public interest to substitute funded debt for stock in order to give the holder thereof a return to which he would not be entitled as a stockholder."

The proposed refinancing is opposed by intervening preferred stockholders who contend that it would be accomplished at the expense of the preferred holders. No dividends have been paid on the preferred stock since March, 1946, and the cumulations amount to $7.50 a share which is the maximum amount permitted to accumulate. The C.G.W.'s argument in favor of the exchange proposal, as summarized by the examiner, is that it will afford the preferred holder an opportunity to exchange his shares, upon which dividends need not be paid even if earned, for a debenture upon which interest must be paid if earned, "thus permitting him if he so desires to obtain income during any period in which the applicant may have earnings otherwise available for dividends, but which must be spent to preserve and protect the applicant and its properties."

The basis of exchange would be $20 principal amount of the debentures and one-fifth of a share of common for each share of preferred. The examiner pointed out that a preferred holder would thus exchange securities having a par value of $50 (plus $7.50 of accumulated unpaid dividends) for securities having a par value of $30. He added: "On the assumption that the debentures would be worth about half of par and the common stock its current market value, viz, about $8 a share, each share of preferred stock, now selling at about $13 or $14 a share, would be exchanged for securities having a market value of $12." Leading up to his adverse recommendation on the proposal, the examiner noted that issuance of the debentures was not necessary in order to give some immediate income to the preferred holders. "The board of directors," he said, "may, if it sees fit, devote part of the net income that would have to be paid out as interest on the debentures to the payment of dividends on preferred stock with no more interference with its policy than will result from payment of interest on the income bonds."

New York, Chicago & St. Louis.—*Lease of W. & L. E.*—The Interstate Commerce Commission has postponed until November 17 the effective date of its July 21 order authorizing this road to lease the properties of the Wheeling & Lake Erie (see *Railway Age* of July 30, page 64). The July 21 order provided that it would become effective 40 days from that date, but the postponement was sought by the Nickel Plate and Wheeling. The commission has also extended from August 25 until September 15 the period within which petitions for reconsideration and reargument of the case (Finance Docket No. 16308) may be filed. This additional time was sought by the Akron, Canton & Youngstown.

New Securities

Application has been filed with the Interstate Commerce Commission by:

Indiana Harbor Belt.—To assume liability for $2,970,000 of equipment trust certificates to finance in part the acquisition of the following equipment:

	Description and builder	Estimated Unit Cost
12	1,000-hp. Diesel-electric switching locomotives (General Motors Corporation, Electro-Motive Division)	$ 98,140
25	1,000-hp. Diesel-electric switching locomotives (Electro-Motive)	102,180

Total estimated cost of all equipment is $3,732,180. The certificates would be guaranteed by the I.H.B.'s proprietary companies—the New York Central, the Michigan Central, the Chicago & North Western, and the Chicago, Milwaukee, St. Paul & Pacific, each of which filed an application for authority to assume liability on that basis. The certificates would be dated September 15, and would mature in 15 annual installments of $198,000 each, beginning September 15, 1950. They would be sold on the basis of competitive bids with the interest rate fixed by such bids.

Division 4 of the I.C.C. has **authorized:**

Wheeling & Lake Erie.—To issue $6,870,000 series B 2¾ per cent general

and refunding mortgage bonds and to issue nominally $4,000,000 series C 2¾ per cent general and refunding mortgage bonds. The proceeds of the series B issue will be applied toward the payment of $6,870,000 of first consolidated mortgage 4 per cent bonds due September 1, 1949.

The commission has approved a New York, Chicago, & St. Louis plan to lease the properties of the W.&L.E., as reported in *Railway Age* of July 30, page 64, under which the transfer of the C bonds to the Nickel Plate is permissible. Upon such a transfer, the bonds would be available to the Nickel Plate for paying a $5,000,000 W.&L.E. note to the Chase National Bank of New York or to obtain reimbursement for balances due it from the W.&L.E. under the lease, provided further authority is obtained from the commission.

The report authorized the sale of the series B issue at 98.132, the bid of Halsey, Stuart & Co., and associate. On that basis, the average annual interest cost will be approximately 2.86 per cent. The bonds, which were reoffered to the public at 98.875, will be dated August 15 and will mature August 15, 1974. The bonds of both series will be redeemable for purposes other than the sinking fund at any time prior to maturity and the series B bonds will be redeemable on any interest-payment date through operation of the sinking fund. Redemptions on the former basis will be at prices ranging from 101⅞ during the issue's first year to par during its last year. To the extent that funds are available, sinking fund payment for the B bonds will be made in semiannual installments of $50,000 each. No sinking fund will be established at this time for the series C bonds.

Average Prices Stocks & Bonds

	Aug. 23	Last week	Last year
Average price of 20 representative railway stocks	37.59	37.95	49.01
Average price of 20 representative railway bonds	86.10	85.81	89.53

Dividends Declared

Chesapeake & Ohio.—common, 75¢, quarterly, payable October 1 to holders of record September 7; 3½% convertible preferred, 87½¢, quarterly, payable November 1 to holders of record October 7.

Erie & Pittsburgh.—7% guaranteed, 87½¢, quarterly, payable September 10 to holders of record August 31.

Philadelphia, Germantown & Norristown.—$1.50, quarterly, payable September 4 to holders of record August 20.

Pittsburgh, Bessemer & Lake Erie.—75¢, semiannual, payable October 1 to holders of record September 15.

Southern Pacific.—$1.25, quarterly, payable September 19 to holders of record August 29.

Wheeling & Lake Erie.—75¢, quarterly; extra, 68¾¢, both payable October 1 to holders of record September 16.

Investment House Publications

[The surveys listed herein are, for the most part, prepared by financial houses for the information of their customers. Knowing that many such surveys contain valuable information, *Railway Age* lists them as a service to its readers, but assumes no responsibility for facts or opinions which they may contain bearing upon the attractiveness of specific securities.]

Baker, Weeks & Harden, One Wall st., New York 5.

Illinois Central. 6% Non-Cumulative Preferred Interesting for High Yield, Wide Dividend Coverage. August 12.

Lehigh Valley. Adjustment Plan Effective August 1. August 4.

Dreyfus & Co., 50 Broadway, New York 4.

Missouri Pacific General 4s of 1975. August 23.

Kerr & Company, 704 South Spring st., Los Angeles 14, Cal.

The Railroad Outlook. August 5, No. 840.

Vilas & Hickey, 49 Wall st., New York 5.

Missouri Pacific Railroad Company. Reorganization Plan. August 23.

ABANDONMENTS

Application has been filed with the Interstate Commerce Commission by

Chicago & North Western.—To abandon a branch from Scribner, Neb., to Oakdale, 114 mi. The application said that the line is no longer economically useful nor required in connection with the operation of the system.

Division 4 of the I.C.C. has authorized:

DeKalb & Western.—To abandon its entire line from DeKalb, Miss., to Sucharnoochee, 11.7 mi., as a result of diversion of traffic to the highways.

Norfolk Southern.—To abandon its North and South Beach routes between Camden Heights, Va., and Lake Station at Virginia Beach, 18.5 miles.

RAILWAY OFFICERS

EXECUTIVE

Vernon C. Mickelson, whose appointment as assistant to vice-president—personnel of the Chesapeake & Ohio, with headquarters at Detroit, Mich, was reported in *Railway Age* of August 13, was born in California April 3, 1909. He received his bachelor's degree from Stanford University in 1931 and the following year obtained a master's degree from the University of Montana, subsequently engaging in post graduate work at the University of California. Prior to entering railroad service, he was employed by the federal government for four years and in April, 1947, joined the C. & O. as chief of wage and salary administration, at Cleveland, Ohio. Mr. Mickelson continued to serve in that position until his recent appointment.

Francis Joseph Ivimey, whose appointment as assistant to the president of the Algoma Central & Hudson Bay at Sault Ste. Marie, Ont., was reported in *Railway Age* of August 13, was born February 17, 1912, at London, England, and attended Magdalen School and Magdalen College, Oxford. Mr. Ivimey entered railroad service in 1934 with the Southern of England as general manager's cadet, under the cadet training program. In 1938 he became assistant to London (West) divisional superintendent and the following year he was appointed assistant to docks and marine manager at Southampton for the Southern. In September, 1939, Mr. Ivimey went to France as second lieutenant, Royal Engineers Supplementary Reserve (Transportation) with the British Expe-

Francis Joseph Ivimey

ditionary Force, commanding Transportation Company R. E. in France. In 1941 he went to the Middle East Forces in command of a similar company operating in Egypt, Palestine and Libya. Mr. Ivimey was appointed assistant director transportation (stores) M.E.F. with the rank of lieutenant colonel in 1944 and demobilized in September, 1945. In 1946 he became assistant divisional marine manager at Southampton for the Southern (succeeded by "British Railways").

OPERATING

G. A. Kellow, assistant engineer of the Chicago, Milwaukee, St. Paul & Pacific, at Chicago, has been promoted to assistant to general manager, with the same headquarters, effective September 1.

David Berman, trainmaster of the Chicago, Rock Island & Pacific, with headquarters at Eldon, Iowa, has been promoted to superintendent of the Cedar Rapids division, with headquarters at Cedar Rapids, Iowa. He succeeds **Marion Roberts,** who has been granted a leave of absence.

George D. Hughey, whose appointment as general manager, in charge of operations, maintenance, construction, purchases and stores, of the Delaware & Hudson, with headquarters at Albany, N. Y., was announced in *Railway Age* of August 6, was born in Oakmont, Pa., December 7, 1884. He attended Rensselaer Polytechnic Institute and prior to entering railway service was employed as transitman, Bureau of Surveys, at Pittsburgh, Pa., from June, 1907, to January, 1909. In April, 1909, he became

a transitman for the Carnegie Steel Company, at Mingo Junction, Ohio, and on April 17, 1910, he joined the Bessemer & Lake Erie, also as transitman at Greenville, Pa. On January 1, 1913, Mr. Hughey went with the Delaware & Hudson as inspector, maintenance of way at Albany, N. Y., and subsequently served as division engineer at Plattsburg, N. Y., from August 8, 1917, to October 15, 1921, when he was transferred to Oneonta, N. Y. He was superintendent at Plattsburg from May 1, 1925, to October 1, 1928, when he was promoted to superintendent of transportation at Albany. Mr. Hughey was appointed assistant general manager at Albany on April 1, 1945, which position he held until his recent promotion.

FINANCIAL, LEGAL & ACCOUNTING

Ward S. Pringle, whose promotion to general auditor of the Colorado & Southern (part of the Burlington Lines) at Denver, Colo., was reported in the *Railway Age* of July 23, was born on February 2, 1898, at Chicago, and attended the Northwestern University School of Commerce and a special session of Harvard University's Graduate School of Business Administration. Mr. Pringle entered railroad service in January, 1917, in the accounting department of the Chicago, Rock Island & Pacific, and joined the Chicago, Burlington & Quincy in August, 1920, as a clerk in the auditor of expenditures' office at Chicago. He was promoted to traveling joint facility accountant at that point in 1922, serving in the same capacity until 1925, when he became department head, joint facility department. From 1926 to 1928, he held the position of chief clerk, auditor of expenditures, at Chicago, subsequently being advanced to assistant auditor of expenditures. In May, 1932, Mr. Pringle became assistant auditor of freight accounts at Chicago, where he was located at the time of his recent promotion.

TRAFFIC

F. K. Hollyman, general freight agent—sales and service of the Ontario and Algoma districts of the Canadian Pacific with headquarters at Toronto, Ont., has been appointed assistant freight traffic manager—sales and service, at Montreal, Que., with supervision over Quebec and New Brunswick districts, also United States agencies Buffalo, Pittsburgh territories and east, succeeding **J. Fullerton,** who has been transferred to Winnipeg, Man., with jurisdiction over the Prairie and Pacific regions and the United States Pacific Coast agencies. **W. M. Jamieson,** assistant general freight agent at Montreal, has been appointed general freight agent—sales and service—Prairie region, with headquarters at Winnipeg, succeeding **A. M. Shields,** who has been transferred to Toronto, to succeed Mr. Hollyman. **A. S. Fleet** has been appointed chief of division bureau at Montreal, with jurisdiction over divisions, Eastern region, succeeding **A. W. Izzard,** who succeeds Mr. Jamieson as assistant general freight agent at Montreal, with jurisdiction over rates and divisions, Eastern region.

Mr. Hollyman, who entered the service of the Canadian Pacific at Toronto in 1917, was district freight agent at London, Ont., from 1945 to 1947, when he went to Montreal as division freight agent. In February, 1948, he was named general freight agent at Toronto, which position he held until his recent appointment.

John A. Ohlund, district freight agent of the Southern, with headquarters at Boston, Mass., will retire on September 1, after more than 37 years of service with the Southern system.

George F. Buckingham, whose appointment as assistant general traffic manager of the Canadian Pacific at Montreal, Que., was reported in *Railway Age* of August 20, entered railroad service in 1907 in the freight traffic department of the Canadian Pacific at Montreal, his native city. Mr. Buckingham rose to the position of assistant general freight agent at Montreal in 1934 and two years later became general freight agent there. In February, 1948, he went to Winnipeg, Man., as freight traffic manager, which position he held until his appointment to the newly-created position of assistant general traffic manager at Montreal, effective Septembr 1.

George F. Buckingham

James J. Hitchell, district passenger agent of the Jersey Central Lines, has been appointed general eastern passenger agent, with headquarters as before at New York. Mr. Hitchell, who is 39 years old, succeeds **Alfred Kubli,** whose retirement was reported in *Railway Age* of July 23. Mr. Hitchell started his railroad career with the Jersey Central on March 22, 1926, as a stenographer in the passenger traffic department. On March 3, 1936, he was appointed secretary to the passenger traffic manager; on May 5, 1941, traveling passenger agent at Newark, N. J., and on September 1, 1947, district passenger agent at New York.

Harry Arkle, whose appointment as freight traffic manager of the Canadian Pacific at Winnipeg, Man., was reported in *Railway Age* of August 20, was born at Gateshead-on-Tyne, England, and served overseas in World War I with the 29th Battalion, Canadian Expeditionary Forces. Mr. Arkle has spent his entire career with the Canadian Pacific at Winnipeg, where he started as a clerk in 1912. He served as division freight agent from 1943 until 1946, when he became general freight agent. In February, 1948, he was appointed assistant freight traffic manager, which position he held at the time of his appointment as freight traffic manager, effective September 1.

Harry Arkle

J. Russell Mase, commercial agent of the St. Louis Southwestern at Tyler, Tex., has been appointed general agent at that point, effective September 1, succeeding **J. T. Post,** who has resigned.

E. M. Woodworth, general agent of the Chicago Great Western, with headquarters at Boston, Mass., retired on July 31 after more than 28 years of service with the Great Western and a railroad career of 45 years. He has been succeeded by **A. J. Dineen.**

Willard R. Godley, whose promotion to general passenger agent of the Gulf, Mobile & Ohio, with headquarters at Chicago, was reported in *Railway Age* of August 13, was born in that city on November 18, 1895. During World War I he served with the quartermaster corps in the railroad transportation division as second lieutenant. He entered railroad service in his native city in 1910 with the Pennsylvania, and ten years later joined the passenger department of the Alton (now part of the G. M. & O.). After serving successively at New York and Kansas City, Mo., he was transferred to Detroit, Mich., in 1938 as

traveling passenger agent. In 1943 Mr. Godley was advanced to district passenger agent at Detroit, which position he held at the time of his recent promotion.

MECHANICAL

J. G. Crawford, fuel engineer of the Chicago, Burlington & Quincy, with headquarters at Chicago, has retired following 48 years of service with that road. Born on July 26, 1878, and graduated by Cornell University in 1901, Mr. Crawford began his Burlington career as assistant on a dynamometer car. He later entered the road's special apprentice course at Aurora, Ill., and subsequently served in the testing laboratory, locomotive and car shops, and as assistant to master mechanic. He became special inspector, motive power department, in 1905, and in the following year was made fuel engineer, to which post were added the duties of fuel inspection in 1908. In 1925 Mr. Crawford was appointed general manager and purchasing agent of the Valier Coal Company, wholly owned by the Burlington and producing coal for its use. From 1916 to 1922 Mr. Crawford was secretary-treasurer of the International Railway Fuel Association.

E. S. Farley, master mechanic of the Chicago, Rock Island & Pacific, with headquarters at Chicago, has been promoted to superintendent of motive power, second mechanical district, with headquarters at El Reno, Okla., succeeding the late **H. C. McCullough. L. B. Close,** master mechanic at Little Rock, Ark., has succeeded Mr. Farley.

C. D. Allen, shop superintendent of the Chesapeake & Ohio at Huntington, W. Va., has been promoted to assistant superintendent of motive power, with headquarters at Richmond, Va. **W. V. Hinerman,** assistant to superintendent motive power, has been appointed assistant superintendent of the motive power, with headquarters as before at Richmond.

Hugo M. McInnes, whose appointment as assistant superintendent of motive power, Pere Marquette district, Chesapeake & Ohio, with headquarters at Grand Rapids, Mich., was reported in *Railway Age* of August 13, was born December 22, 1897, at Toronto, Ont. He first entered railroad service in May, 1917, as head statistical clerk, auditor of disbursements, of the Pere Marquette (now part of the C. & O.) at Detroit, Mich. He joined the Detroit & Mackinac in 1920 as chief accountant at Tawas City, Mich., and re-entered P. M. service three years later, holding the positions of accountant, chief clerk and superintendent of motive power until 1943. Mr. McInnes was subsequently promoted to assistant to chief mechanical officer at Detroit, in which position he was serving at the time of his recent appointment.

ENGINEERING & SIGNALING

Bernard F. McGowan, whose promotion to superintendent of signals of the Minneapolis, St. Paul & Sault Ste. Marie, at Minneapolis, Minn., was reported in *Railway Age* of June 11, was born on August 9, 1901, at Evanston, Ill. Following graduation from high school in 1918 he pursued a correspondence course in electrical engineering and the same year became employed by the General Railway Signal Company. He subsequently held various positions with that company in signal construction and in the engineering department at Rochester, N. Y. In 1925 he joined the Michigan Central as circuit engineer at Detroit, Mich., and also served in the same capacity on the New York Central, Lines East, at Albany, N. Y. He returned to the General Railway Signal Company in

Bernard F. McGowan

1929, working on subway signaling installation in the New York subway, including assignments on the New York Rapid Transit and the Board of Transportation, City of New York, subway system. After engaging in similar duties on the New York subway for the Union Switch & Signal Co., he again returned to the General Railway Signal Company at Rochester as circuit engineer. Mr. McGowan was later assigned to the San Francisco (Cal.)-Oakland Bay bridge project and subsequently entered the service of the Chicago Rapid Transit Company as engineer of design for the elevated and Chicago subway signaling. In February, 1941, he was appointed signal supervisor of the Soo Line at Minneapolis and was later advanced to assistant signal engineer, the post he held at the time of his promotion.

Roy S. Belcher, who has relinquished his position, at his own request, as manager of treating plants of the Atchison, Topeka & Santa Fe System, at Topeka, Kan., as reported in *Railway Age* of August 20, was born at Stoughton, Mass., on January 6, 1883. After graduation from high school at Galesburg, Ill., in 1900, he continued his education at Lombard College in Galesburg, at Knox and at Brown's Business College, returning to Lombard in 1906 to complete a special course in industrial chemistry. Mr. Belcher entered railroad service with the Chicago, Burlington & Quincy in April, 1904, subsequently serving as a stenographer and lumber clerk in the supply department. He also worked in the Burlington's storehouse office part-time while attending college.

Roy S. Belcher

In 1907 he became employed by the Burlington as a chemist in the wood preserving plant at Sheridan, Wyo., later being transferred to the laboratory of tests at Aurora, Ill., in the same capacity. He subsequently joined the Texas Tie & Lumber Preserving Co. (predecessor of the Santa Fe Tie & Lumber Preserving Co. and a Santa Fe affiliate) as treating plant chemist at Somerville, Tex. In 1913, Mr. Belcher was appointed chemist in the office of the manager of treating plants, system, at Topeka and the next year was advanced to superintendent treating plants at Albuquerque, N. M., returning to the Somerville plant in 1915 as superintendent. He was promoted to manager of treating plants, system, in April, 1920, which position he has relinquished.

PURCHASES and STORES

M. E. Baile, whose appointment as assistant general purchasing agent of the Missouri Pacific Lines at St. Louis, Mo., was reported in the *Railway Age* of July 30, was born at Warrensburg, Mo., on February 16, 1885. After completing his education in high school and business college, he entered M. P. service in June, 1907, as a clerk in the general storekeeper's office. From 1909 to January, 1911, he served with the Kansas City Southern at Pittsburg, Kan., as chief clerk to the general storekeeper, and subsequently joined the Gulf Pipe Line Company at Tulsa, Okla., as purchasing agent. He returned to the M. P. in October, 1911, as chief clerk to the dision storekeeper at Kansas City, Mo., being advanced to assistant district storekeeper at Sedalia, Mo., in 1918. He held

News Department continued on next left-hand page

with an EYE to maintenance

Simplicity and accessibility are two cardinal virtues of any mechanical device. Combined they make possible ease of maintenance with reliability following naturally. With this as our golden rule, many refinements suggested by experienced operating engineers and others conceived by ourselves have been incorporated in this new switcher. The novel arrangement of electrical controls and auxiliary equipment, providing easy and ample access for inspection and adjustment, is a fair example. Water-cooling of the engine exhaust manifold to equalize thermal expansion in related connections, thereby eliminating causes of serious exhaust gas leaks, is another.

The major consideration in ease of maintenance is a comfortable margin of ready power in the prime mover at all conditions of operation. The diesel engine in this switcher is a powerful rugged four-cycle supercharged type with 8-cylinder in-line configuration. All parts of it are precision machined requiring no hand fitting. Since the engine is supercharged, pistons are made smaller. With lighter reciprocating weights, the engine responds more rapidly to throttle changes. This procedure conforms strictly to modern trends in diesel-engine design.

Accessibility has been emphasized in the diesel-engine construction. For example, all gears in the timing train can be removed easily without disturbing the electric generator. Any piston can be pulled without removing its respective cylinder liner.

Arrange to have your people who know railroad diesels take a careful look at this switcher. It is powered by our own Hamilton-built engine which provides a full 1000 horsepower to the traction motors. Standard Westinghouse electrical equipment is used. Accessories are standard and of highest grade.

LIMA HAMILTON CORPORATION

DIVISIONS: *Lima, Ohio*—Lima Locomotive Works Division; Lima Shovel and Crane Division. *Hamilton, Ohio*—Hooven, Owens, Rentschler Co.; Niles Tool Works Co. *Middletown, Ohio* — The United Welding Co.

PRINCIPAL PRODUCTS: Locomotives; Cranes and shovels; Niles heavy machine tools; Hamilton diesel and steam engines; Hamilton heavy metal stamping presses; Hamilton-Kruse automatic can-making machinery; Special heavy machinery; Heavy iron castings; Weldments.

the position of division storekeeper, successively, at Kansas City and St. Louis, until his appointment as assistant supply agent at the latter point in 1930. Mr. Baile became general storekeeper at St. Louis in March, 1946, in which capacity he was serving at the time of his new appointment.

SPECIAL

C. R. Young, whose coming retirement as director of personnel Illinois Central, at Chicago, was reported in the *Railway Age* of August 13, was born on May 25, 1885, at Oakland, Ky., and received his higher education at Ogden College, Bowling Green, Ky., and Bowling Green Business University. Before starting his railroad career, Mr. Young served as pharmacist apprentice and 1st lieutenant in the National Guard and as a police reporter on the former Louisville Herald. He joined the Louisville & Nashville in 1903, as train baggageman, entering I. C. service in 1905 as stenographer in the chief dispatchers office, at Fulton, Ky. After serving successively as

C. R. Young

car distributor, assistant timekeeper and timekeeper, he also held clerkships in the operating department at Princeton, Ky., Memphis, Tenn., New Orleans, La., and Fulton. In 1918 he was appointed yardmaster at Fulton, and later that year was promoted to trainmaster, being further advanced to superintendent at that point in 1920. He was transferred to Carbondale, Ill., in 1924, and was appointed superintendent of transportation at Chicago in 1926. Between 1935 and 1945, Mr. Young held the position of manager of personnel at Chicago, and subsequently became director of personnel there. He will retire from the latter post on September 1.

Gideon Jeffery Willingham, whose promotion to director of personnel of the Illinois Central at Chicago, effective September 1, was reported in *Railway Age* of August 13, was born at Mayfield, Ky., on February 12, 1900. Mr. Willingham began his railroad career with the I. C. in September, 1917 as chainman and rodman at Fulton, Ken. In 1922 he was appointed instrumentman at Carbondale, Ill., and the following year was transferred to East St. Louis, Ill. He also served as general foreman and resident engineer at the latter point until 1926, when he became resident enginer on the Edgewood cutoff, Marion, Ill., and sub-

Gideon Jeffery Willingham

sequently returned to Fulton in that position. From 1928 to 1937 he served as track supervisor and as supervisor of trains and track at Thompsonville, Ill., Metropolis and Fulton, later being advanced to trainmaster at Fulton. He also held the position of trainmaster at Council Bluffs, Iowa, and Champaign, Ill. Mr. Willingham was promoted to superintendent at Champaign in July, 1941, and was further advanced to assistant to vice-president and general manager at Chicago in June, 1944. He became manager of personnel at Chicago in August, 1945, from which post he will be promoted on September 1.

OBITUARY

Frank H. Garner, division superintendent of the New York Central at Chicago, died on August 17 at Mercy hospital (Chicago) where he had been taken the previous day after falling on the stairs to an elevated train station. Mr. Garner, who was born at Persia, Iowa, on June 24, 1888, attended the public schools of Council Bluffs, Iowa, and the Omaha Commercial College. He entered railroad service in 1906 as a yard clerk and telegrapher on the Chicago & North Western at Council Bluffs, and subsequently served on the Southern Pacific as chief yard clerk and chief clerk at various points until his appointment as freight brakeman for the Union Pacific at Laramie, Wyo., in 1911. From 1912 to 1914, he served as inspector of transportation, general manager's staff, at Omaha, Neb., and later joined the Baltimore & Ohio as general yardmaster at Chicago Junction (now Willard, Ohio). He first entered N. Y. C. service in 1915 as yardmaster at Black Rock yard, Buffalo, N. Y., becoming yardmaster on the Erie at Jersey City, N. J., in 1916. After being general yardmaster in charge of the New York and Jersey City terminals, he became traveling yardmaster on the staff of the vice-president, and in 1919 was employed on the staff of the director general of railroads at Washington, D. C. Mr. Garner was later assigned to the Seattle (Wash.) terminal territory, and in 1920 was appointed trainmaster of the Great Northern at Minneapolis, Minn., being advanced to assistant superintendent there in 1922. The following year he re-entered N. Y. C. service as general yardmaster at South Bend, Ind., where he remained until his transfer to Elkhart, Ind., in 1925 as trainmaster. Mr. Garner was appointed assistant superintendent at Chicago in 1938, and in 1942 became superintendent.

Edwin W. Soergel, vice-president—traffic of the Chicago, Milwaukee, St. Paul & Pacific, with headquarters at Chicago, died August 20 in St. Luke's hospital, Chicago. Mr. Soergel was born in Chicago on July 15, 1886, and entered railroad service in 1900 in the traffic department of the Milwaukee in his native city, later serving in that department at Butte, Mont., and Seattle, Wash. During the period of federal control of the railroads he served with the Portland District Freight Traffic Committee, with headquarters at Portland, Ore., and sub-

Edwin W. Soergel

sequently was transferred to the Western Freight Traffic Committee of the U. S. Railroad Administration, with headquarters at Chicago. After federal control, Mr. Soergel returned to the Milwaukee as assistant general freight agent at Chicago, and early in 1926 was promoted to general freight agent at that point. He was advanced to assistant freight traffic manager in 1927 and to freight traffic manager in 1938. Mr. Soergel was elected vice-president in February, 1948, which post he held at the time of his death.

H. C. McCullough, superintendent of motive power, second mechanical district, Chicago, Rock Island & Pacific, at El Reno, Okla., died on August 5.

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Current Publications

BOOKS

Florida's Flagler, by Sidney W. Martin. 280 pages. Published by the University of Georgia Press, Athens, Ga. $4.

While it traces Henry Flagler's life from his heritage and youth, through his early dealings in grain and his association with John D. Rockefeller and the Standard Oil Company, the major part of this book treats of his role as promoter of Florida, and, of course, includes discussion of his railroad enterprises.

Controlling Factors in Economic Development, by Harold G. Moulton. 397 pages. Published by the Brookings Institution, 722 Jackson Place, N.W., Washington 6, D. C. $4.

This volume is in the nature of a synthesis of the economic studies in which the author has participated during the last 30 years. In his preface, Mr. Moulton says "The older textbooks on the 'principles' or 'laws' of economics were largely preoccupied with the factors which limit production and the laws which govern relative values and income shares. Later treatises were perhaps more concerned with the forces which maintain the economic system in a state of equilibrium. Scant attention was given to the dynamic factors which progressively offset the limitations of nature and open vast possibilities for economic development. Part I looks backward and undertakes to appraise the forces and factors which accounted for the extraordinary, and unexpected, economic progress of the nineteenth and early twentieth centuries, and also the sources of maladjustment which restrained the rate of advancement. Part II looks forward. It indicates the economic potentialities of the century ahead and outlines the policies essential to their realization."

The Russian Railways, by P. E. Garbutt. 95 pages, illustrations. Published by Sampson Low, Marston & Co., 25 Gilbert st., Oxford st., London, W.1, England. Price, 3s.6d.

The author first presents brief summaries of the Russian railways prior to the Revolution, between the Revolution and World War II, during the war, and the outlook for their current and future development. He then discusses their organization and staff, way and structures, motive power and rolling stock, and traffic. Various operating and financial statistics are contained in appendices.

Granger Country; A Pictorial Social History of the Burlington Railroad, edited by Lloyd Lewis and Stanley Pargellis. 226 pages, illustrations. Published by Little, Brown & Co., 34 Beacon st., Boston 6, Mass. $5.

Drawn from every source, many of them reproduced here for the first time, the pictures in this book, together with the authors' informed comment, tell the graphic story of the pioneer-farmer as he moved westward not only from the Atlantic states but from Europe into the land that he was to make "the breadbasket of the nation." As a story of the opening of our Western lands, it represents the expansion and development of the American continent as a whole. It also represents, in terms of one of the nation's great railroads (the Burlington), the part which our developing transportation systems have played in the story of the West.

After the Whistle Blows, by Jack Petrill, 351 pages. Published by the William-Frederick Press, 313 W. 35th st., New York 1, for the Industrial Recreation Bureau, 162 W. 56th st., New York 19. $10.

The administration of industrial recreation — its problems and their solutions — is covered in this volume in a detailed discussion of programs, advantages and disadvantages of centralized programs, the four phases of industrial recreation, organization and responsibilities, internal organization of the plant, finances, facilities, activities, leaders, public relations and publicity, and unions. It also embraces an analysis of leisure time, safety, gambling in factories, actual case histories, and reports and schedules, as well as the history and tradition of industrial recreation.

Moving Heaven and Earth, by Donald F. Ackland. 224 pages, illustrations. Published by Iversen-Ford Associates, 175 Fifth ave., New York 10. $2.

A biography of the life and accomplishments of R. G. LeTourneau, president of the company bearing his name, whose inventiveness created machines which have revolutionized the earthmoving world. Starting with his boyhood days as a youth incurably restless in body and mind, it tells of his early career in California as a "one tool" mechanic with a passion for welding, rebuilding and improving pioneer landleveling machines. It then proceeds to describe the man who now divides his time between directing five plants and following a 5,000-mi.-a-week traveling schedule to fulfill religious speaking engagements.

Bottom-Up Management; People Working Together, by William B. Given, Jr. 171 pages. Published by Harper & Bros., 49 E. 33rd st., New York 16. $2.50.

The goal of the management philosophy presented in this book is the release and stimulation of individual initiative. Mr. Given, who is president of the American Brake Shoe Company, writes from a strong conviction, confirmed by the successful experience in his own company over a period of years, that the human factor is the most important element in business management. In this book he explains the day-by-day operation of "Bottom-Up Management" in enlisting the support and creative contributions of supervisory and rank and file employees, so that a firmer sense of partnership may prevail.

PAMPHLETS

Preliminary Inventory of the Records of the Board of Investigation and Research—Transportation, compiled by Leo Pascal. 12 pages. Published by the National Archives, Washington 25, D. C. Free.

Identified as Preliminary Inventory No. 19 and National Archives Publication No. 49-24, this pamphlet lists all of the records of the Board of Investigation and Research—Transportation which had been transferred to the National Archives by February, 1949.

Transit Fact Book, Seventh Edition,, 1949. 16 pages. Prepared by the American Transit Association, 292 Madison ave., New York 17. Up to 10 copies, free; over 10 copies, 10 cents each.

Gives complete information on basic data and trends in the local transit industry of the United States, including final figures on operations during the calendar year 1948.

Atomic Energy for Industry. 19 pages. Issued by the United States Atomic Energy Commission, 19th St. & Constitution ave., N.W., Washington, D. C. Free.

Lists available Atomic Energy Commission declassified documents of particular interest to industry. Subjects covered are general industrial and laboratory equipment; metallurgy and ceramics; engineering lectures, summaries, charts, etc.; radiation detection and measuring instruments; electronic circuits, instruments and apparatus; vacuum engineering and apparatus; apparatus; valves, seals and pumps; fluorine and fluorocarbon production and chemistry; analytical procedures, techniques, and apparatus; chemicals and chemical processes, and industrial medicine.

Iceway, by L. K. Sillcox. 24 pages, tables. Published by L. K. Sillcox, New York Air Brake Company, 420 Lexington ave., New York 17. Free.

Mr. Sillcox presented this discussion of the St. Lawrence seaway and power project at the University of Michigan on May 27. It covers costs, economic effects, history, and power and transportation aspects of the proposed seaway.

Joint Equipment Committee [Report on] Costs of Railroad Equipment and Machinery, July 1, 1949. 33 pages. Published by the Association of American Railroads, Finance, Accounting, Taxation & Valuation Department, 330 Transportation bldg., Washington 6, D. C. Free.

Brings up to date (through 1948) the report of historical costs on locomotives, freight and passenger cars, and average relationship of costs on various types of equipment and machinery.

Index to "Baldwin Locomotives" and "Baldwin," 1922-1948, prepared by Thomas T. Taber, III, and Paul T. Warner. 71 pages. Published by the Railroadians of America. Available from the secretary, Nils G. Bergenholtz, 1416 Munn ave., Hillside 5, N. J. $2.

This index covers all the articles that have

appeared in the magazine "Baldwin Locomotives," and its successor, "Baldwin," since it was first published in July, 1922, through 1948.

Motor Carrier Equipment Financing. 23 pages. Published by the American Trucking Associations, Inc., 1424 Sixteenth st., N.W., Washington 6. D. C. Free.

A report on highway transportation of freight, prepared in response to the current interest of lending institutions in financing possibilities in the trucking industry.

Employee Communications for Better Understanding. 30 pages. Published by the National Association of Manufacturers, 14 W. 49th st., New York 20. Free.

To what extent do industrial employees get the facts about the company for which they work, and how much do they know about its operations, its policies and its practices as they affect the employee as an individual? In this pamphlet the N.A.M. explores some of the fundamental aspects of these questions; e.g., why should every employer tell his company's story to his employees?; what advantages can be expected to accrue to employees and the public from a two-way flow of information — from employees to management and from the front office to employees?; what subjects need talking about?; how to share free enterprise with employees?; how to tell the economic story in terms of company operations?; and how can this "communicating" — orally and in writing — be done most effectively?

Supervisory Training: Case Studies. Published by the Policyholders Service Bureau, Metropolitan Life Insurance Company, One Madison ave., New York 10. Free.

The purpose of this report is to provide executives interested in supervisory training with actual and specific examples of how other companies train their supervisors, so that they may have a means of comparing their own methods and practices with those used in successful programs in other companies. Ten executives cooperating with the bureau describe phases of their own or their companies' experience in supervisory training. The subjects they discuss in original signed articles are: supervisory training programs; improving group discussion as an aid in attaining management objectives; training by lecture-discussion; determining individual supervisory training needs; initial training for the new supervisor; an executive development program for supervisors; supervisory training in small operating units; developing leadership, and multiple-management's role in training.

Papers Presented at the First Short Course on Industrial Packaging and Materials Handling. 248 pages, illustrations. University of Illinois Bulletin, No. 57, Vol. 46, April, 1949. Published by the University of Illinois, Engineering Experiment Station, Urbana, Ill. $1.

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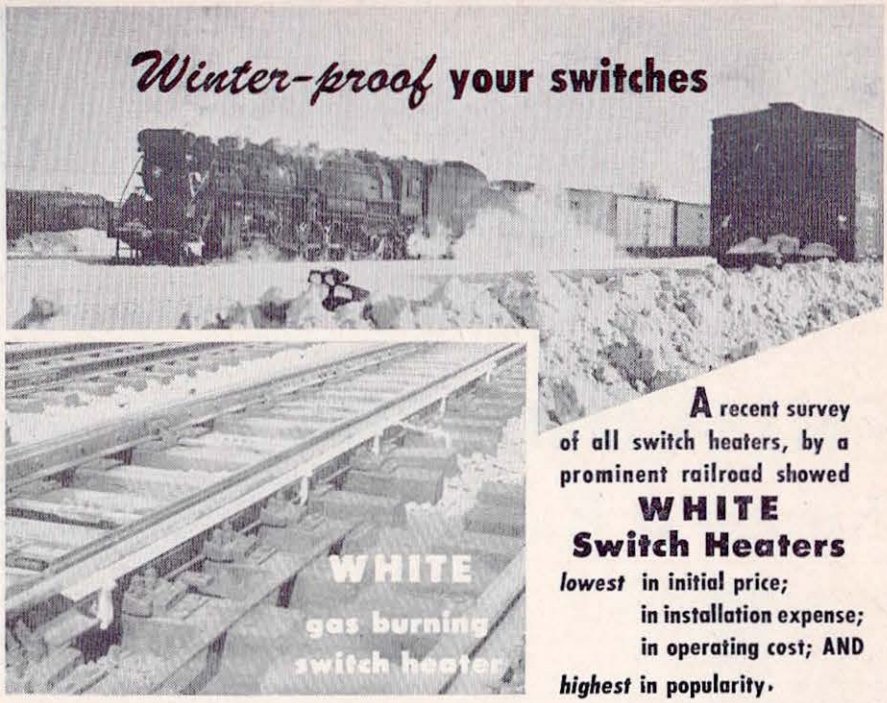

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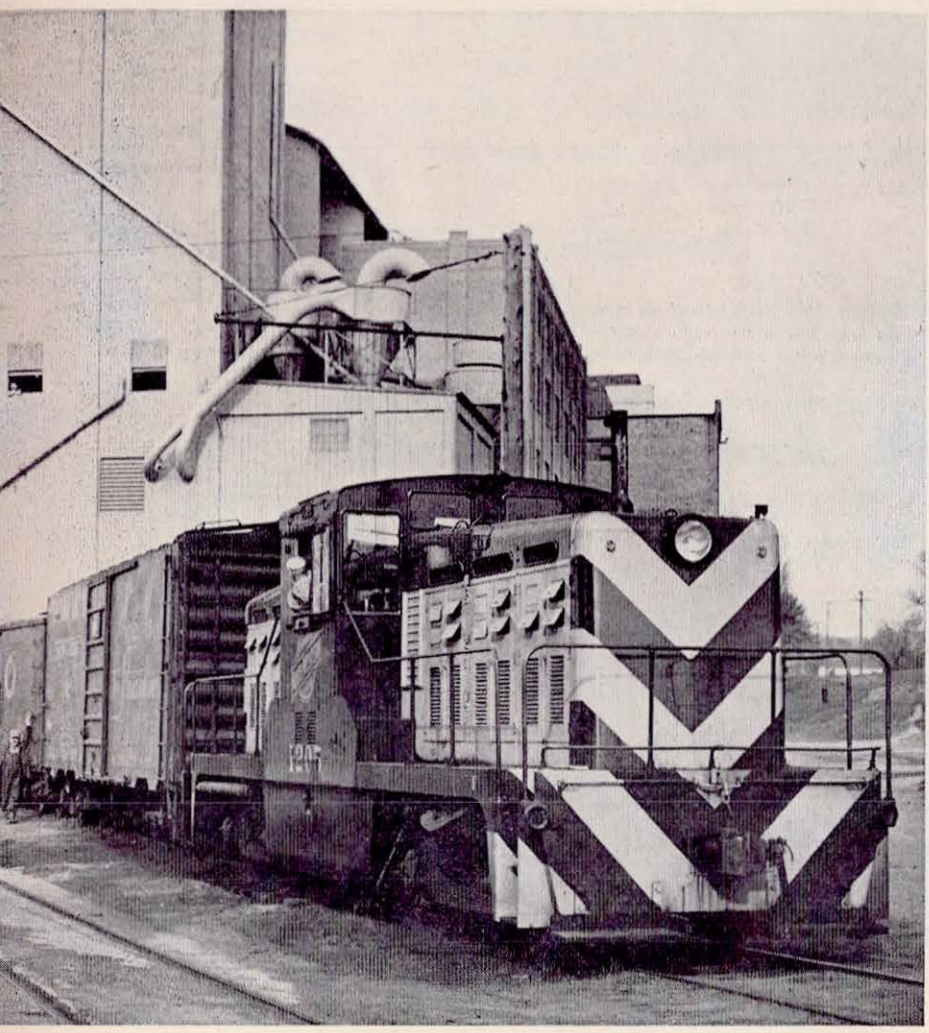

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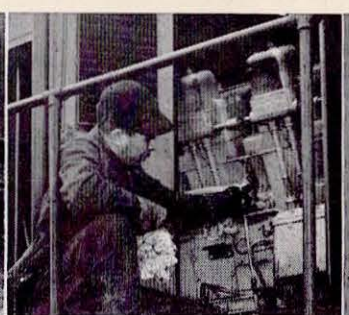

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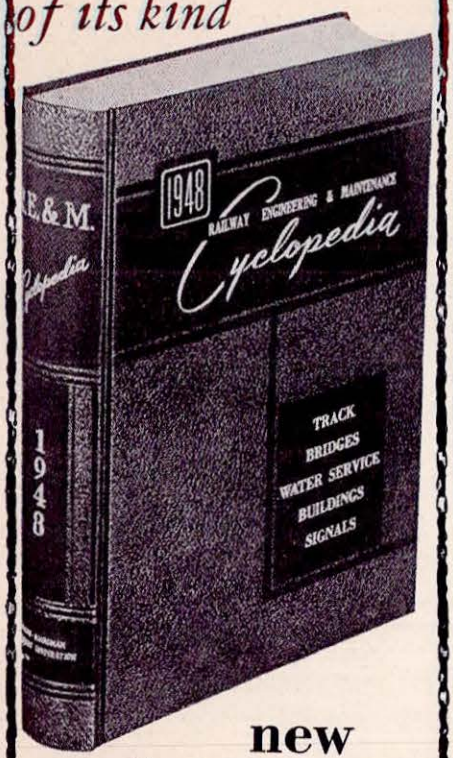

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presented was held at Chicago October 4-7, 1948, and was conducted by the Department of Mechanical Engineering and the Extension Division of the University of Illinois, in cooperation with the Society of Industrial Packaging and Materials Handling Engineers. Railroad representation included papers by C. E. Swanson, assistant general storekeeper of the Chicago, Burlington & Quincy, on "Applying Modern Materials Handling Methods to Railroad Stores Operation," and W. H. Roehrig, supervisor of merchandise and demurrage of the Atchison, Topeka & Santa Fe, on "Mechanical Handling of Materials on Docks and Platforms," and a special session devoted to loss and damage prevention. An abstract of Mr. Swanson's paper appeared in the *Railway Age* of October 9, 1948, page 67, and a report of the meetings and of Mr. Roehrig's paper in the issue of October 16, page 65.

Reports of the Inland Transport Committee of the International Labor Organization. Available from the International Labor Office, Washington branch, 1825 Jefferson place, Washington 6. D. C. $2 for set of four reports, or $1 for Report I, 25 cents for Report II, 40 cents for Report III, and 35 cents for Report IV.

These four reports constitute the items on the agenda of the third meeting of the committee which was held in Brussels, Belgium, last May. Report I, the General Report, covers action taken in the various countries in the light of the conclusion of the second session; steps taken by the office to follow up the studies and inquiries proposed by the committee, and recent events and developments in the industry. Report II covers decasualization of dock labor; Report III, protection of young workers on inland waterways, and Report IV, technical methods of selection of workers for the inland transport industry.

Railroad Facts, 1949 Edition. Statistics for 1948. 96 pages, illustrated and indexed. Published by Western Railways Public Relations office, 105 West Adams street, Chicago 3. Free.

Railroad Facts presents a statistical summary of 1948 railroad operations with comparisons, in most cases, back to 1916. The contents are grouped under headings: the railroads in 1948; plant; service; rates; earnings; purchases; employees, and operations. Illustrative of some of the presentations which show at a glance information not generally available are, for example, details of gross capital expenditures of the Class I railways, by items, for the years 1929 to 1948, inclusive; the number of railway employees by classifications and their average wages, and freight locomotive daily mileages from 1918 to 1949, inclusive.

The Highway Five. A safety booklet for children available for distribution by railroads through elementary schools. Published by the National Safety Council 20 Wacker drive, Chicago 6.

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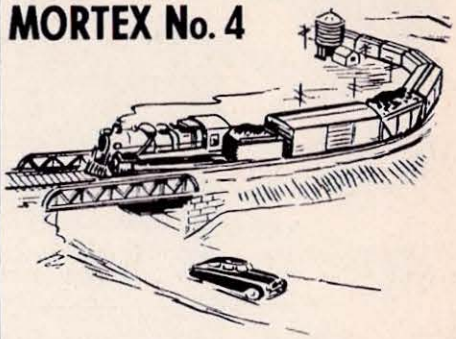

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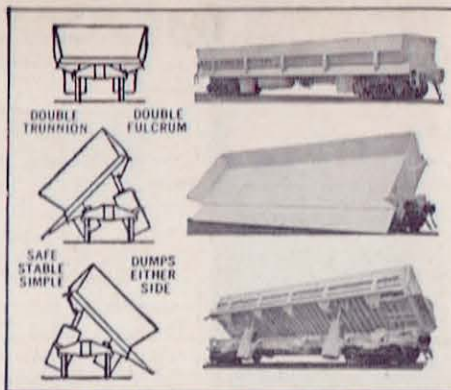

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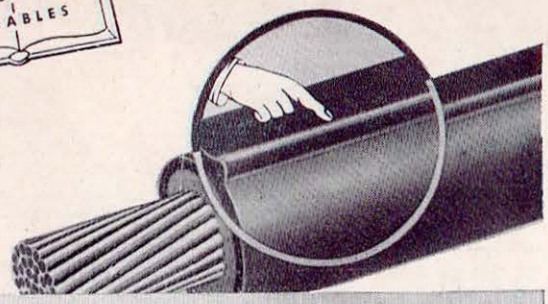

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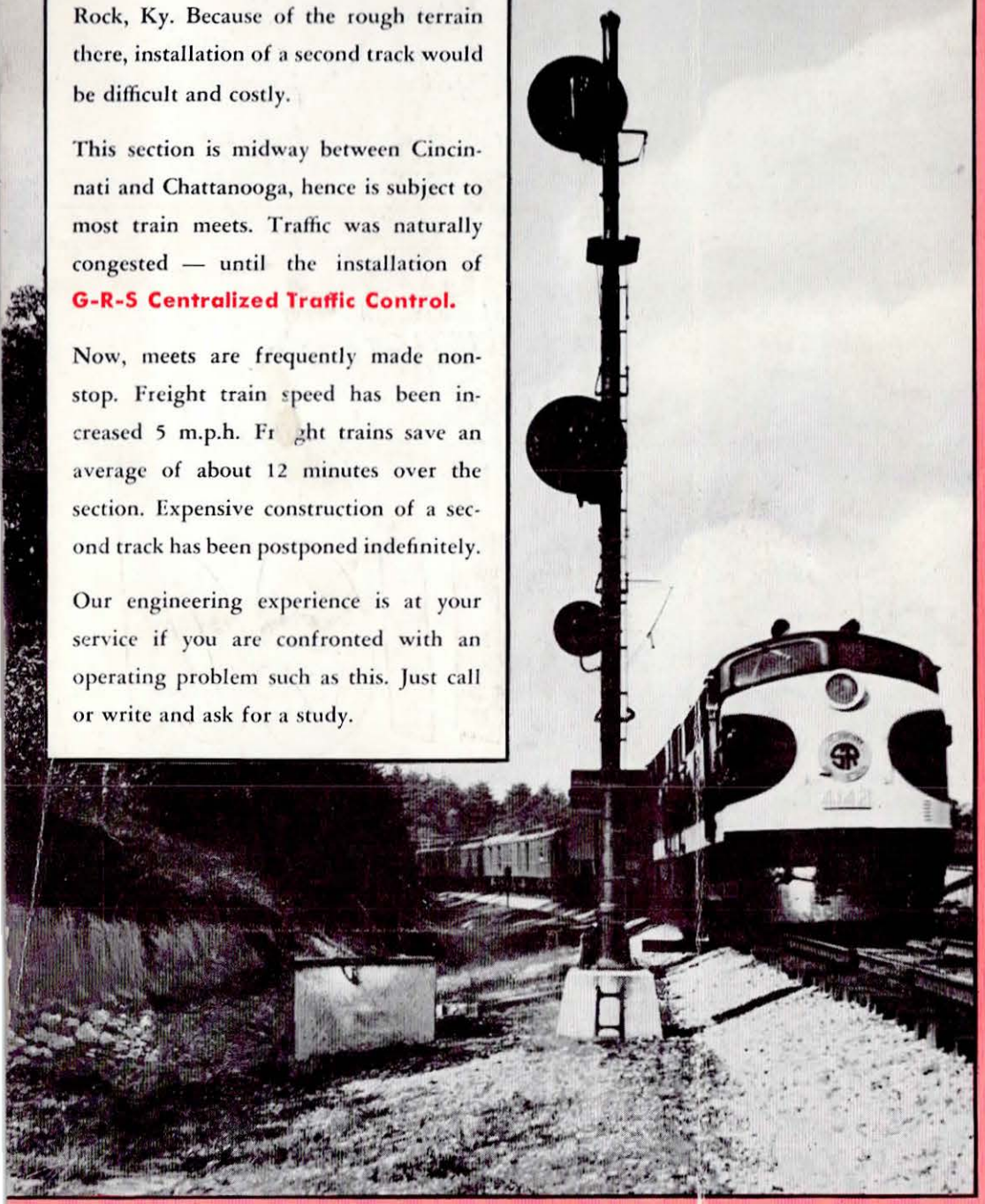

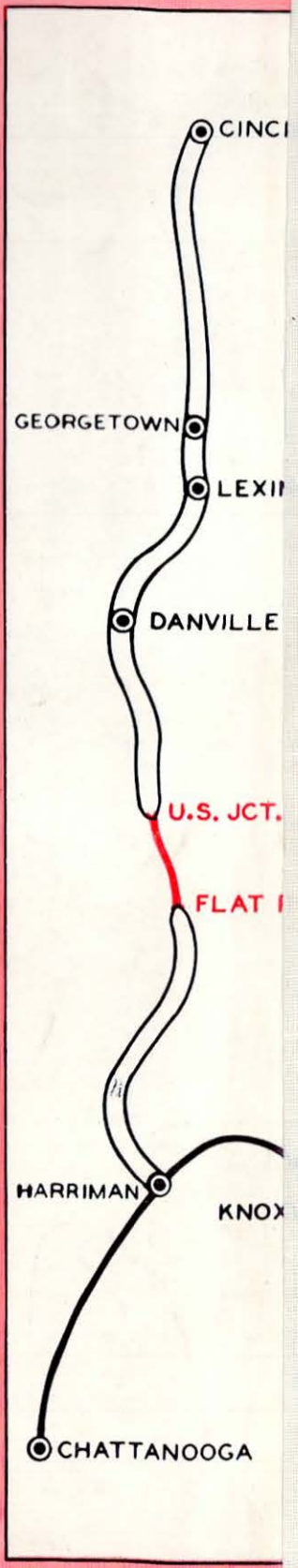

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